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# Southern Planter

A MONTHLY JOURNAL

DEVOTED TO

Practical and Progressive Agriculture, Horticulture,  
Trucking, Live Stock and the Fireside.

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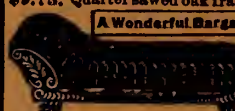
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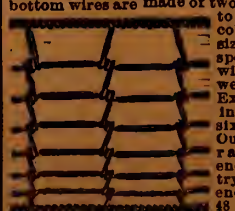
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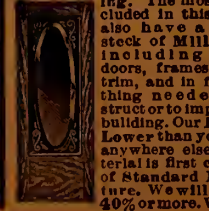
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# The Southern Planter.

DEVOTED TO

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Agriculture is the nursing mother of the Arts.—XENOPHON.  
Tillage and pasturage are the two breasts of the State.—SULLY.

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70th Year.

RICHMOND, VA., SEPTEMBER, 1909.

No. 9.

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## Farm Management.

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### WORK FOR THE MONTH.

The month of August to this writing (23rd) has been over a large part of this State too dry for the best doing of the crops, especially has this been the case in the middle and northern sections, where the injury to the corn crop has been serious and it is too late now for this damage to be made good. Over all this section corn will be a short crop. Although in Tidewater and more southern sections and in the southwest this drouth has not been so persistent, yet more rain would have been welcome. Except upon the river lands the condition of the corn crop has been considerably impaired and we shall not make that increased yield of corn which the increased area planted should have made possible. The threshing of the wheat and out crops has been completed and whilst the quality is almost universally good the yield has not been so good as the appearance of the crops before cutting led us to expect. The wet, cool weather at blooming time is, we think, largely responsible for this. We never knew wheat to thresh out well when the blooming time was cool and wet. We have heard of few crops going over 20 bushels to the acre and of many not making more than 15. We have heard of one crop which made 43 1-2 bushels to the acre in the adjoining State of North Carolina. We have asked the owner of his crop to give us particulars of the preparation for and fertilization of this crop and hoped to have been able to publish this in this issue, but have not yet received same. At this writing we are needing rain all over the State to hasten the growth of second crops of grass and the forage crops.

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The government report on winter wheat makes the yield a little over 15 bushels to the acre, being an increase of one bushel to the acre over that of last year. The total crop is placed at nearly 433,000,000 bushels as compared with nearly 437,000,000 bushels a year ago. The opinion of the market seems to be that this is an overestimate of the yield and that is our own opinion based on the reports from the different winter wheat States. We still adhere to the opinion we expressed two months ago, that the yield will not turn out to be much if any in

excess of 400,000,00 bushels. The government report had the effect of causing a decline in the price to some extent for a few days, but this has been largely recovered and we do not expect to see any further serious reduction, even though the spring wheat crop should be exceptionally good. At present it seems likely that this crop will be about an average one, assuming weather conditions to remain normal until harvest is completed. European conditions do not indicate more than an average crop except in England where the condition is above the average and stocks of wheat in all countries are abnormally low. The indications therefore are for good markets throughout the winter for this staple. Canada has promise of a good crop and to that country rather than this will Europe have to look for the wheat she will need. We have not grown more than will be needed for food and seed for our own use and have a greatly reduced surplus carried over from last year. In Virginia the estimated production of wheat this year is 8,758,000 bushels which is several million bushels less than we shall need to feed our people. In North Carolina the yield is put at 5,444,000 bushels. In South Carolina the yield is put at 3,810,000 bushels. Maryland makes an estimated yield of 11,034,000 bushels. Tennessee a yield of 8,133,000 bushels.

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The indications still are for a record crop of corn in the country. It will in all probability reach and may succeed 3,000,000,000 bushels. Notwithstanding this enormous promise of yield the price of corn still keeps firm in the market and it would appear therefore as though it was impossible to grow more of this crop than the market will take care of. Last year very little was exported and yet stocks are not large. The problem of providing meat for our population of nearly 100,000,000 people seems to make the size of the corn crop, if only it is large enough, a matter of small moment as affecting the price. The stock feeders must have it as the market must have the meat and the public pays the bill.

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Both the quantity and quality of the tobacco crop has been materially reduced by the dry weather in this State

and North Carolina, whilst in Kentucky wet weather has caused much damage in some sections. Though the area planted in this crop in the South is much larger than last year it does not seem likely now that the yield will be much, if any, in excess of that crop. The quality will largely determine the price.

The excessively hot weather in the cotton sections has still further impaired the prospective yield of the crop and the indications are for a much smaller crop and for higher prices. One good result has followed this hot weather for which cotton planters especially in Texas, can be devoutly thankful. It has been so hot up to this writing that the Boll weevils have been practically destroyed everywhere. They have been literally burned up and no further damage from this source is apprehended this year and it is to be hoped that next year the pest will not be in evidence, except to a very limited extent.

The work of seeding cowpeas and crimson clover in the corn crops at the last working and on the stubbles, has been much more largely practised this year than ever before in our knowledge. This is a fact of great import in the agricultural progress of the State as it goes down to the basic source of the want of productivity in our soils. Humus is the first necessity of our soils for bringing them to average productiveness and the growth of these two legumes means the adding of this in its best form and at the same time the supplying of nitrogen to meet the requirements of our staple crops. The work of sowing crimson clover or a mixture of crimson clover, wheat, oats and rye on all land not intended to be seeded in wheat or oats, should be pushed forward as the land can be got ready. It may be sown all through this month and even up to the middle of October with a reasonable probability of making a successful stand; after that time or even after the first October hairy vetch is safer to sow to secure a stand, as it is less liable to injury by frost than the clover. In seeding the crimson clover we prefer to sow with it a mixture of wheat, oats and rye, as being more certain to stand the winter and make a good cover on the land. Sow 12 pounds of crimson clover and 3 pecks of the grain mixed in equal parts per acre. In seeding hairy vetch sow with the vetch 3 pecks of wheat or winter oats per acre. The vetch should be sown at the rate of 25 pounds to the acre. There are two varieties of the annual clover—the crimson and the white blooming. The white blooming is later in coming to maturity than the crimson by about 10 days or a fortnight, and therefore where a considerable area is seeded to be used as a green fodder crop, it is well to sow both varieties in separate lots the one to follow the other and thus lengthen out the feeding period. They are of equal value as feed or for turning under to supply humus and nitrogen to the soil. In seeding crimson clover to be used as a pasture during the winter and early spring for sheep and hogs it is well to sow with it about 2 pounds of rape or turnip seed or both per acre. These make a good addition to the grazing value of the crop, but should not be seeded when the object is to make hay of the clover as they cannot be cured for hay.

The saving of the various fodder crops such as cow-

peas, soy beans, sorghum and millet should have attention, as they become ready for cutting and care should be taken to cure them carefully before hauling to the barn. In the July issue we published an article on the saving of cowpea hay to which we refer our readers. The great point to be observed in curing this crop is to not let it be open to the sun any longer than is necessary to wilt it thoroughly and then to cure out in the windrow and cock. The hot sun soon burns and shrivels the leaves and then they fall off the vines and are lost and they are the most valuable portion of the feed. Cured in the windrow or cock they are saved and the feed is most valuable making with corn fodder an almost balanced ration. When storing this crop in the barn it is a good plan especially when the peas are not over-well dried to put in a layer of wheat or oat straw between each load of the peas. This straw absorbs the moisture out of the peas and insures perfect keeping and the straw itself becomes a better feed and is readily eaten by the stock with the peas. Soy beans may be saved either as a hay crop, being cut before the seed ripens, and put up into cocks to cure out as soon as thoroughly wilted or they may be cut for a seed crop after the grain is mature and be tied in sheaves and be set up in stooks like a grain crop. Millet should be cut before the seed forms to make the best hay and the safest to feed and should be cured like hay in windrow and cock. Sorghum, after it is fully grown, is difficult to cure so that it will not mould in the barn. It should be set up in shocks like corn after having laid on the ground several days to wilt. It will keep well in the shocks in the field all winter and this is perhaps the safest way in which to save it as stored in the barn it almost always moulds as it is practically impossible to dry out the moisture sufficiently to prevent this. If cut when only partially grown and when sown thickly so that the stalks are fine it can be cured as a hay crop and makes useful feed. Grown with cowpeas and cut when the peas are ready it makes excellent feed and makes the pea hay easier and quicker to cure, as it keeps the cocks or windrows more open and permeable by the wind and sun. The curing of these fodder crops at this season of the year requires more time and care than earlier in the season, but they are, when well cured, more valuable as feed.

The filling of the silo should have attention this month. We are glad to know that there are to day more silos to be filled in one county of the State than were to be found in all the State five years ago. Live stock keepers have at last come to appreciate what we have so long been preaching, that a silo is the cheapest and best barn they can put up and that they can preserve their crops in a silo whatever the condition of the weather may be and that the product is in that succulent condition which makes it relished by the stock and gives better results. It is equally valuable for dairy stock and for beef animals and the use of this feed results in much economy in feed and when once stored it is ready for the stock and will keep in good condition indefinitely. The best silage is made from crops which have arrived almost at maturity. When cut when in full growth the product will be a watery, sour silage of much smaller feeding value than if the cutting is deferred until the grain begins to harden.



Whilst corn is the principle crop used to fill the silo and the best when used alone for that purpose, yet a more perfect feed can be made by mixing with cowpeas or soy beans, as these two crops will supply the protein lacking in the corn. A silage made of one-third cowpeas or soy beans and two-thirds corn will make almost a completely balanced ration. The different crops should be cut into the silo together so as to mix them thoroughly as they go in. Sorghum makes good silage either alone or mixed with cowpeas or soy beans in the same proportion as when used with corn. Do not be in a hurry to fill the silo too rapidly. Much more can be put in and the product will be a better one if the silo is filled more slowly. Cut half the day and fill the silo the other half. When the silo is full or all the crop available is stored in it cover with a foot of cut waste or marsh hay or straw or chaff or cotton seed hulls and water this freely. It will then mat together and make a perfect seal for the silage and will prevent loss from mould on the tops. When filling the silo see that the corn as it falls from the carrier is spread over the whole surface of the silage so as to have an equable product. The tendency is for the corn to accumulate under the carrier and thus make a very rich feed in that part and a poorer product in the rest of the silo.

The completion of the work of seeding grass clover and alfalfa should have immediate attention, as this is the last month in the fall in which this work ought to be or can be done with a reasonable prospect of securing a good stand. Sown later than this month the seeding is very apt to be injured by frost, as the stand does not have time to cover the land so as to keep the frost from heaving the plants out of the ground. In our last two issues we have written fully on this subject of grass seeding and refer our readers to these issues for full instructions. The prime requisite for success in grass growing is well prepared land and rich land. It is no use attempting to grow grass on poor land or badly prepared land. It simply means wasting the seed. Select the best land you have and that which has been well prepared for the last crop and set about bringing this into the finest possible condition by working it with the harrow, cultivator and roller. If possible, apply a ton of lime to the acre and work into the soil. Then apply all the well rotted manure you can spare and two hundred pounds of bone meal and two hundred pounds of acid phosphate per acre, broadcast, and mix well with the soil and seed liberally, harrow in lightly, and, if dry enough, roll. Do not sow any grain with the grass and clover seed. Give this the opportunity to get all the fertility in the land and it will pay better than a grain crop and make a permanent stand.

The winter oat crop should be seeded this month. Early seeding is essential to success. Late seeded oats are almost invariably injured badly by the frost. They have not time to get tillered over the ground sufficiently to keep the frost from heaving out the plants. A great mistake made by most farmers is that they will persist in seeding oats on the poorest land on the farm. Whilst it is true that oats will make a crop of some kind on

poorer land than almost any other crop, except it may be rye, it is doing the crop a great injustice to subject it to this treatment. It is a crop too full of great possibilities to be so treated. If put on good land and liberally helped a yield of from fifty to seventy-five bushels to the acre can be safely counted upon, and this yield will pay better than an average wheat crop, and, besides this, the oats and the straw are worth more for use on the farm than a wheat crop. Another advantage in growing this crop is that it enables one to get a part of the land in crop in the fall and thus gives better opportunity for preparing land for spring crops. Select a piece of good land, plow it deeply, and work it well, and apply two hundred and fifty or three hundred pounds of acid phosphate per acre and then seed, preferably with the drill, so as to give the seed a cover of four or five inches. If you have not a drill cover the seed with a cultivator. During the last few years experiments have been made in several Southern States in seeding oats in deep drills, leaving a good ridge between each drill. This has been found to protect the plants very effectually from winter killing and the result has been a much better yield. It may be well to try this system experimentally with part of the crop. We are strongly of the opinion that much too light seeding is one cause of the poor average yield of the oat crop in the South. We would never sow less than two bushels to the acre and we have sown three with good results. The top dressing of the crop during the winter with farm yard manure is a practice which almost invariably pays well and the earlier this is done after the crop has made a good start the better. The protection afforded is great and the winter rains and snow wash the plant food out of the manure into the soil and the active roots take this up at once and this ensures strong root growth upon which the success of the crop largely depends. The Virginia Grey Winter oat is the best to sow at this time in the South. The Appler and the Culberson are probably the two next best varieties, but they are more certain to make good yields seeded in February.

The work of preparing the land for the seeding of wheat ought now to have constant attention. It is an undoubted fact that one great cause of the small average yield of the wheat crop in the country is inadequate preparation of the soil before seeding. No application of fertilizer of any kind can make good this neglect. Select good clay loam soil of the most fertile character on the farm and have the same plowed deeply as early as possible. Where possible, select a clover fallow or land upon which peas have been grown, as these supply nitrogen in an available form, to give the grain a start and help it through the winter. The importance of early and perfect preparation of the soil is well illustrated by an experiment which has been conducted in Kansas for the past two years, of which the following is a summary:



## METHODS OF PREPARING SEED-BED FOR WHEAT

METHOD OF PREPARATION	Yield per acre, bu.			Cost per acre for preparation 1908-'09	Cost per bushel 1908-'09	Value of crop 1908-'09 at \$1.00 per bushel	Net Profit
	1907-'08	1908-'09	Av. 2 yrs.				
Disked July 15, and at frequent intervals until seeding. Not plowed.....	14.95	28.24	21.59	\$6 88	24.3	\$28 24	\$21 36
Double disked July 15. Plowed September 15, seven inches deep.....	20.11	30.56	25.33	5 53	18.1	30 56	25 08
Plowed September 15, seven inches deep.....	1 59	27.98	23.78	4 66	16.7	27 98	2 32
Plowed September 15, three inches deep.....	21.19	30.76	25.97	4 66	15.1	30 76	25 10
Plowed July 15, seven inches deep.....	28.84	35 02	31.93	5 59	15.8	35 02	29 43
Plowed August 15, seven inches deep.....	31.74	40.12	37.43	4 53	11.3	40 12	35 59
Plowed August 15, seven inches deep. Not worked until September 15.....	30.73	38 12	34.32	4 03	10.6	38 12	34 09
Listed July 15, seven inches deep and ridges harrowed down.....	20.02	32.17	26 09	4 40	13.6	32 17	27 77
Listed July 15, ridges split August 15, harrowed down.	23.67	31.33	27.50	4 65	14.8	31 33	26 88

## The Results Explained.

The field upon which this experiment was conducted is upland soil, previously seeded to alfalfa. The alfalfa was broken in the fall of 1904, planted to corn in 1905, and sown to wheat in 1906. The experiment was started in 1907 on this wheat stubble. Nine different methods of preparing a seed-bed have been tried, as indicated in the table.

Plowing.—Plowing was done on July 15th, August 15th, and September 15th. It will be seen from the table that the early plowing on July 15th did not give the highest yield or the largest net profit. This was due to the lodging of the wheat on this plot. Being an old alfalfa field, organic matter rich in nitrogen was abundant in this soil. The early and continuous preparation probably produced nitrates in such large amounts that a rank growth of weak straw resulted, and the wheat lodged. With a soil lower in fertility, or in a section further west, where less moisture was available, this condition would not usually occur.

The highest yields were obtained from the August 15th plowing. Upon these plots the grain did not lodge. The plot plowed August 15th and cultivated after plowing received two harrowings before September 15th. Other wise it was worked in exactly the same manner as the other August 15th plowed plot, which was not surface cultivated until September 15th. These two harrowings in 1907 increased the yield four bushels per acre, and in 1908 two bushels per acre, or an additional expense of 50 cents resulted in a profit of \$3.00 in 1907 and \$1.50 in 1908.

The late plowing, September 15th, has each year given the lowest yield of any of the plowed plots, although every effort was taken to prepare a good seed bed by surface cultivation immediately before seeding. In 1908 the late plowed plots were harrowed three times, disced

once and acme-harrowed once after plowing before seeding. The wheat was seeded on all plots October 9th. Thus the seeding was not done for nearly a month after plowing; yet the large amount of work put on these late plowed plots was not enough to prepare a sufficiently firm seed-bed. The plot plowed shallow gave a slightly increased yield over the deep plowed plots where each was plowed as late as September 15th. The shallow plowed plot could be better firmed down. Double disking ground early in the season to be plowed late gave a slightly increased yield. This was due to the fact that the disking kept the ground in better shape for plowing, and it firmed down more readily than the undisked ground.

Listing.—Listing has not proved especially successful as a method for preparing a seed-bed for wheat, giving a less yield than early or medium early plowing. Listing has not proved a cheap method at this Station during the past two years, due to the heavy summer rains that have made frequent harrowing and disking necessary in order to keep down the weeds.

Discing.—The same condition has made it very expensive to prepare a seed-bed for wheat by discing without plowing. It required eleven discings in 1908 to prevent the growth of weeds and prepare a good seed-bed by this method. Discing has also resulted in a low yield, producing the least amount of wheat and the lowest net profit of any method employed in this experiment.

## Conclusions Drawn.

The soil conditions and environment suitable for the successful growth of a wheat crop are well established and fairly well understood. With good seed, a few simple factors largely determine the stand and the yield of the crop and the quality of the grain produced.

In order to secure the ideal condition for seed germination and plant growth, a seed-bed for planting wheat and other small seeds should not be mellow to too great a depth, but rather the soil should be mellow and well pulverized only about as deep as the seed is planted. Below that depth the soil should be firm and well settled, making a good connection with the subsoil, so that the soil water stored in the subsoil may be drawn up into the surface soil.

We commend the foregoing to the careful consideration of our readers. It is pregnant with matter of the highest importance for every wheat grower and abundantly supports our arguments in favor of early, perfect preparation of the soil. Where a pea fallow is used as the preparation for the wheat we would not plow the crop down, but cut it into the land with the disc. If the land was properly prepared for the pea crop by deep plowing and perfect preparation the lower strata of the soil will be in an ideal condition for the wheat crop and all that is needed is a proper preparation of the surface soil with the disc, the harrow and the roller. The advantage of preparing the land in this way is that the nitrogen gathered by the peas is kept in the soil for the support of the wheat crop. If the land is plowed again the nitrogen on the roots is thrown on to the surface and most of it is lost into the air. Nitrogen is the most difficult of all the fertilizers to conserve. It rapidly leaches out, if no crop is growing on the land to utilize it, or, if exposed to the air, it evaporates. It is too valuable to be lost in either way. We are almost daily



in receipt of letters asking what fertilizers to use on the land to ensure a better yield of wheat. This is a question which it is exceedingly difficult to answer with satisfaction to ourselves or our inquirers, as a careful consideration of many of the experiments would seem to leave the question in great doubt. As we have already said, we believe the first great essential is better and earlier preparation of the soil and, next, the selection of land rich in vegetable matter, especially that derived from the legumes. These, however, are by no means all that are required, as wheat requires for its successful growth an abundant available supply of the mineral fertilizers—phosphoric acid and potash. Of these the most important is the phosphoric acid. The potash required is almost always in sufficient supply in the clay loams which are the best wheat soils, but requires the application of lime to make it available. We always used lime in preparing our wheat land and are satisfied that we got good results from this. We would, as soon as we had plowed the land, apply at least a ton of lime per acre and work this in and let it lay for a week. This will make sufficient potash available. For the phosphoric acid needed we would use bone meal and acid phosphate in equal parts, say, at the rate of three hundred pounds to the acre. Wherever farm yard manure is available we would use this as a top dressing during the winter. This largely prevents winter killing and provides immediately available food for the young plants. In the spring a top dressing of nitrate of soda at the rate of one hundred pounds to the acre applied as soon as the crop begins to grow can be generally used with great advantage. It gives the plant a quick start and enables it to get hold of the mineral food in the soil. October is early enough to sow and even then not until after a sharp frost has killed off the flies. If the Hessian fly has been troublesome a trap crop of wheat sown as soon as possible will get rid of most of them. For this a strip of land a yard or two wide across part of the field should be sowed. The flies will resort to this to lay their eggs and it should then be plowed under and thus bury both flies and eggs. Carefully select the seed wheat. Blow out all light wheat and weed seed and seed only the heaviest, plumpest grains. Seed liberally. We are of the opinion that on the most of our lands two bushels per acre is better than a less quantity. Rich land may do with one and a half bushels per acre, but we have more land needing two bushels than we have land on which one and a half bushels is sufficient. We would like to see our farmers give more attention to wheat production than they have done in the past. The time has come when we must either produce more wheat or import to meet our needs. Our present production is inadequate to feed our people and provide seed and the evidence of this is the advancing price of the grain. We ought to produce as much per acre as England, viz., thirty bushels on the average of a series of years, whereas we only make on the average about thirteen bushels. This year the average is claimed to be about fifteen—only one half that of England. When we prepare our land as well as the English farmer does and get it into as good a state of fertility as his, we can equal his production.

#### FARM TENANCY AGREEMENT.

In our last issue will be found an answer to an inquiry as to the proper terms to embody in an agreement for the tenancy of a farm on the share principle. The inquirer wrote to the Manager of the McKinney farms as there suggested for his opinion on the matter. This gentleman replied that the conditions were so different to those applying on the McKinney estate that he did not think the agreements there in force applicable. On that estate he said nothing was furnished to the tenant except one-half of the seed wheat and oats, and one-half of the fertilizer used, the tenant supplying all stock and implements. Since receiving that reply, the owner of the land and his prospective tenant have come together and agreed upon terms satisfactory to both, of which the following is a short abstract:

By this agreement the tenant is to haul out the barn yard manure and scatter on a field once in every thirty days.

To sow forty acres in wheat and grass on land now in tobacco and corn.

To plant one hundred bushels of potatoes and forty thousand tobacco plants on land now in sod.

To sow a field, now in sod and containing about thirty acres, in cowpeas, and to cut and use cowpeas for hay on the place next year.

To sow thirty-six acres in rye after the present corn is cut off.

To plow and thoroughly pulverize a field of thirty-one acres, to haul and spread on said field fifteen hundred bushels of lime, and sow this to wheat and grass in addition to above forty acres.

To keep weeds cut from fencing on roadside and to keep fencing in as good condition as it now is.

To keep all vehicles, machinery and implements in good repair and all horses shod.

To pay for all feed and labor including the harvesting and threshing of grain crops.

The owner to furnish all necessary horses, machinery, tools and implements to run the place—nothing fancy.

Also, to furnish fifteen hundred bushels of lime, one hundred bushels potato seed, and all the grass, rye, wheat, oat and corn seed. At least ten tons of bone or some other commercial fertilizer, fifty sheep and seven horses.

The tenant is to get one-third of all grain (small), one-third of lambs and wool and straw, one-half of all tobacco, corn and potatoes.

The owner would like to know what our readers think of such an agreement. At any rate, it is satisfactory to both of the parties, and its publication may save some others from much trouble in similar matters.

#### SUGGESTED BY THE AUGUST NUMBER.

##### Underground Silos.

"Farmer" has but a small silo but if he had large ones and a great herd to feed as I once had, he would soon wish all the silo was above ground. I would not want any more underground silos if I was managing a stock farm, which I am not now, for the extra trouble of hoisting out silage from a pit on a large scale involves too much expense.

##### Soil Mulch.

Mr. Beverley is right in valuing a mulch on the land,



but the best mulch of straw is after the straw has gone through the stable, and the best compost is the manure spread on the field as fast as it is practicable to get it there after it is made. A growing compost heap is a wasting pile of manure. Get it on the land where some plant can compost it.

#### Rotation.

Mr. Hicks is right in saying that one legume in five years will not keep up the nitrogen in the soil. We need a shorter rotation, or more catch crops of legumes in the five year one. With peas among corn to be followed by wheat; wheat followed by peas mown for hay, and stubble disced for wheat again, and then clover, one will have legumes enough to enable him to dispense with ammoniated fertilizers.

#### Green Manuring.

I thoroughly believe in the growing of legume crops for the improvement of the soil and the making of first-class forage for stock, but I do not believe in using these crops for manure direct, but want to get the food value first. I would plow under crimson clover for a hoed crop because it is a hard crop to cure at that season of the year, and we can plow it under then without risk of scouring the land, as would be the case with a crop turned under in hot weather to lie and ferment for a sown crop.

#### Spreading Lime.

Mr. Clark would save money and labor by having his lime all in one pile and spreading it with a lime spreader. Spreading lime by hand is worse than spreading manure by hand. I have done a good deal of it, but now, that there are good lime spreaders, I would not try to spread by hand.

#### Dual-Purpose Cows.

Mr. Doak says that one of his short horns gives seven pounds of milk. (This was a printers error. It should have been 17 pounds. See Mr. Doak's article in this issue.—Ed). If he does not need to have cows give more, perhaps he is right. But it is always a beef man who talks dual purpose. The dairymen never do. The dairymen cannot afford to raise veal calves. There is no comparison between dual-purpose in sheep and cows, for a good mutton sheep can just as well be a good wool sheep as not. But the milking conformation is developed in a cow the farther she gets away from the best beef type. If I was making milk for the market, I would want the very best milking machine I could get, and in like manner, if I was in the beef business, I would work for the type that tops the market for beef if the cows only gave enough milk to feed a calf. Milk making in large amount and beef producing of the best type are antagonistic features and result in half and half animals neither the best for the dairy nor the best for beef. The Plymouth Rock fowls are the beef breed of the chicken family, and of course, you see them on the market, for no man who makes a specialty of eggs will keep any but the special egg producers, and these do not go on the market any more than fine Jersey heifers do.

#### Bacon or Lard Hogs.

V. O., who is too modest to sign his name wants to know if I mean that we must go back to the razor back or an inferior type of the lard hog. I was in Smithfield, Va., last week, where the most famous hams in this coun-

try are packed. I saw there a big sign reading, "Todd's Packing House. Established in 1800." There are larger packers than Todd there now. I found that the best farmers there are keeping boars of the Berkshire and others of the lard type to use on the native sows, because they thereby secure a more prolific breed than the pure lard breeds, and they are thus making bacon hogs, not razor backs, and a type that makes the Virginia hams better than any pure Berkshire or Poland China could. No matter what you call the breed, be it Tamworth or Virginia woods hog, what the makers of the best hams and bacon want is the animal that will make a large percentage of lean meat in proportion to the fat. Peanuts and cow peas too, have had a great deal to do with the excellence of the Smithfield product. The western farmer, who sells to the packers in Chicago, is right in sticking to the pure breeds that mature at an early age, for they are more profitable to him. But as few of the Smithfield packers get less than 25 cents a pound at wholesale for their hams, they are right in sticking to the bacon type. I know individual farmers in the Isle of Wight and adjoining counties who never get less than 25 cents a pound for all the hams they can make. It is a matter of individual preference in the customer. I have a friend who prefers the Chicago creosoted hams and bacon to the well smoked and cured product of southeast Virginia. To my taste the Virginia product is far superior, and such is the general opinion, for whenever there is a big banquet in New York, Smithfield hams are sure to be on the menu. But it does not follow that in all parts of Virginia the bacon type will be the most profitable to the farmers, for conditions vary, and the Isle of Wight product is the growth of their own conditions.

#### Salt and Wire Grass.

If by "wire grass, Mr. A. means Bermuda, he will find that it can take more salt than any plant I know. I have seen it running up on the beach where it was washed by every ocean wave. A few days ago I saw the spray dashing in clouds over the sea wall at Old Point Comfort, drenching the Bermuda grass lawn, and the salt does not seem to hurt it at all.

#### Alaska Wheat.

Being called upon this summer to inspect and plan the improvement of a New Jersey farm, for a city professional man, I found there that the owner had bitten at the Alaska wheat fraud, and had some in full head. The heads were the same short, dumpy branched things that I knew many years ago as Mummy wheat, and how many names the worthless thing has had since, no one can guess. It is a poor wheat that millers will not buy, and it is only fit for chicken feed, and if the plot I saw made 10 bushels per acre, it must have threshed out wonderfully. And yet there are people all over the country who swallowed the tales about 200 bushels per acre, and sent their good money for bad wheat. So you tell Mr. Evans correctly, that it is a fraud.

#### Grasses.

The Editor tells Mr. Lacey to sow orchard grass and red top and fescue. I did this year ago, and while the red top is not much in evidence when the orchard grass and Fescue should be cut, it does give a fine aftermath for a later crop. But since then, I have found the best grass to mix with orchard grass is the Tall Meadow Oat



grass. It makes the finest of hay and all stock are very fond of it. While it is at its best on moist land, it will grow well too, on upland. I have come to the conclusion that there are few better grasses for the South than Tall Meadow Oat grass.

#### Cow Pea Hay.

Mr. Jeffer's plan for curing cow pea hay will doubtless cure it, but I have made cow pea hay of the brightest sort for many years, and never made a stake nor a pyramid of stakes, but simply cured it in the cocks as I would clover hay, and put it in the barn while still rather limp, and never failed to have the finest of hay, as Editor Jackson will testify, for he said my hay was more like English hay than anything he has seen in this country, and that is high praise from an English farmer.

W. F. MASSEY.

As to lime spreading, we cannot agree with our correspondent on this subject. We have applied hundreds of tons of lime in our time, and as the result of this experience, have no hesitation in saying that the best way to handle it is to set it on the field in bushel or half bushel piles, directly from the wagon, in which it is hauled from the car. Cover these with a few shovelfuls of earth and leave for twenty-four or thirty-six hours, when they can quickly be spread with a shovel, and if this is done with the wind, the spreader will not be bothered with the dust and it will all be in the field and not on the team or the road. If it is desired to spread the lime at once, let a water barrel follow the wagon and put half a bucketful of water in each heap, and the lime can be spread in one hour's time. When lime is slaked in a large pile and then loaded in a wagon or spreader, to apply to the land, the man who has the loading to do has a job which will cause him to lose all his religion and much of his skin. The slaked lime runs off the shovel like water and flies over everything and burns the skin of the men and animals upon which it settles. The less slaked lime is moved about after it is slaked, the less loss of temper and material will be caused.

We agree with our correspondent as to the Tall Meadow Oat grass and almost invariably advise its seeding with Orchard grass, Red Top and Fescue. If we failed to do so in Mr. Lacey's case, it was an oversight. It is a most valuable grass either for hay or pasture.—Ed.

#### COST OF PRODUCING A BUSHEL OF CORN.

*Editor Southern Planter:*

One of the most successful farmers in Missouri, Mr. David Rankin, of Tarkio, estimates the cost of raising corn at 14.6 cents per bushel, as follows:

(Computed on 60-Acre Tract.)

Fall plowing, 45 acres .....	\$ 45 00
Spring plowing, 15 acres .....	15 00
Breaking stalks on 15 acres.....	3 00
Disking on fall plowing, 45 acres.....	18 00
Harrowing .....	10 50
Seed corn .....	6 15
Planting .....	12 00
Harrowing after planting .....	10 50
Cultivating three times .....	78 00

Thinning and weeding .....	10 00
Husking at 2 1-2 cents per bushel.....	62 25
Shelling and hauling at 2 1-2 cents per bushel....	62 25
Total cost .....	\$333 25
Taxes .....	20 00
Insurance and repairs .....	10 00

Grand total .....\$363 25  
Cost per bushel (41.5 bushels per acre).....\$ 14.6

As Mr. Rankin raises each year about 6,000 acres of corn, he is certainly well qualified to speak with authority.

In this cost-estimate, no land rent is charged. A rental of \$3 per acre would increase the cost 7.4 cents, making a total cost of 22 cents. Some 25 years ago, in Nebraska, we considered raising corn profitable when we got 25 cents a bushel for shelled corn delivered at the station.

It would be interesting to know the cost of raising corn in Virginia, on land yielding 40 bushels per acre. There is very little land in Virginia that with proper cultivation and with sensible crop rotation, would not yield that much.

There is, however, considerable difference in the labor cost. While wages are lower in Virginia, yet labor is not economized as is done in the West.

Will not some of our Virginia farmers compute the actual cost per bushel? Can you raise corn at 14.6 cents per bushel or does it cost you more, and if so, why should it?

It is certainly an interesting subject for discussion. Wasting the fertility of the soil and wasting labor are the principal errors in farming. Feed for teams can be produced as cheaply in Virginia as in any State of the Union. It should not cost more for the keep of a team in Virginia than elsewhere. If it does—and it certainly does—then perhaps there is something wrong with our method of farming.

In the West, each man and team is supposed to work from 40 to 60 acres of corn and sometimes more. Before the corn harvesting machines came in general use, a man would go into the field and husk 50 bushels of corn per day from the standing stalks. He would start early in the morning and bring home a big load at noon, and in the afternoon the man would go out and husk another load. The farmer, or hired man who could not husk 50 bushels of corn (meaning two loads, which would shell out 50 bushels), was not considered a good worker. Some experts would husk 100 bushels per day.

N.

#### THE WASTE OF COTTON SEED.

*Editor Southern Planter:*

What becomes of our annual crop of cotton seed? is a question well worthy of our earnest consideration. In 1907, it appears that we produced 5,912,646 tons of seed. Of this amount 3,943,981 tons were crushed, and there was obtained therefrom 175,724,840 gallons of oil and 1,785,804 tons of meal. Apparently, 2,068,655 tons of seed were consumed on the farm, where they were grown. Only a small fraction of this amount was used for seed, however, so the balance must either have been fed or used directly as fertilizer. If used as feed or fertilizer,

it would not have half as much value per ton as cotton seed meal. Yet these 2,068,665 tons of seed contain, on a low estimate, 40 gallons of oil each, or a total of 8,274,700, worth at 40 cents a gallon, \$33,098,800. In other words, this enormous sum of money was worse than wasted, for the oil is of no service whatever in plant production, being, if anything, a detriment. Fortunately, it does not deplete the fertility of the land as oil consists of carbon, hydrogen and oxygen, elements of plant nutrition obtained directly or indirectly from the air and soil.

But why this enormous needless annual waste? Surely this is a sum of money well worth saving, and would we not be infinitely better off to send these two million and more tons of cotton seed to the oil mills every year and exchange them for cotton seed meal with its high feeding and fertilizing value? To illustrate the point, let us cite the fact that 41,880,304 gallons of oil were exported during the fiscal year 1907. This oil brought an average of 40.8 cents a gallon, or \$17,074,403. During the same year 670,484 tons of cotton seed meal and cake were exported at an average value of \$25.45 per ton, making in all about \$17,062,594. The oil exported took with it no plant food; the cotton seed meal and cake exported carried away on the basis of 18 cents a pound for nitrogen, 6 cents for phosphoric acid and 6 cents for potash more than \$30.00 per ton of plant food, or \$20,114,520. In other words, we received \$3,051,926 less for our cotton seed meal than the plant food contained in it was worth, and yet it has been demonstrated over and over that a ton of cotton seed meal is worth more for the nutrition of certain classes of live stock than almost any concentrate which can be purchased and utilized by the farmer.

Cotton seed meal must certainly have a high feeding value, or else the discriminating farmers of Great Britain and Europe would not use it so freely. That they appreciate its virtues is shown by the lavish way in which they buy it. In 1895, for instance, the amount of cotton seed meal exported was 244,858 tons, which brought at that time \$17.00 a ton. The figures quoted show that it brought in 1907, \$25.45, or an increase of \$8.45 per ton. Instead of the increased price reducing the consumption the above figures show that almost three times as much cotton seed meal was exported in 1907 as in 1895. Where does this cotton seed meal go? is naturally an interesting question. It is chiefly exported to Denmark, Germany and Great Britain. In 1907, Denmark took 277,124 tons; Germany, 224,064 tons; and Great Britain, 90,539 tons. These same countries in 1900 consumed respectively, 136,579, 190,424 and 158,629 tons. Notice the remarkable increase in consumption shown by German and Denmark. Apparently, there is a considerable falling off so far as Great Britain is concerned, but it should be remembered that in recent years Great Britain has obtained a part of its supply from Egypt and other countries, so that in all probability the stockmen of that country are using more than ever at the present time. The chief interest of Denmark is in dairy husbandry. They have not the natural favorable conditions of soil and climate that pertain in many sections of the United States, yet they have developed a dairy business of phenomenal proportions, and supply a large part of the prime butter consumed in Lon-

don and other large cities of Great Britain. Germany has a rapidly increasing population and a very considerable dairy industry. The German people are among the most careful agricultural economists in the world, yet they are taking larger and larger supplies of our cotton seed meal each year, which leads us to believe they must prize it very highly as a foodstuff and fertilizer, and realize that according to the price paid, they are obtaining a very cheap product, a truth which we are now beginning to recognize in the South.

Apparently, cotton seed meal is regarded as an essential food for dairy cattle in these European countries, and if it is true that this meal can be so largely purchased and utilized profitably abroad, it is indeed remarkable that it can not be fed here at home in view of the high prices prevailing for dairy products and the large amount of these foodstuffs which are annually imported into the South. That the export demand is likely to increase is apparent from the figures quoted, and ultimately it would appear as if a market might be found abroad for all our cotton seed meal. But can we afford such a tremendous drain on the plant food resources of our soils? We think not, for each year sees a larger outlay for commercial fertilizers which have but a temporary stimulating effect on crop growth; whereas, the use of farm yard manure would increase the supply of vegetable matter in the soil, make it less liable to wash, and stimulate crop production for much longer periods of time. We do not mean, of course, that the mere feeding of cotton seed meal would render the use of commercial fertilizers unnecessary or inadvisable, but it would mitigate the burden now imposed upon the farmer by his depending exclusively on commercial fertilizers, for it is realized in many sections that commercial fertilizers are not now giving the results one would naturally anticipate from them, and this is directly traceable to the fact that the soils are devoid of vegetable matter and need to be improved so far as their mechanical and physical condition is concerned to ensure more stable yields of corn cotton and other essential crops.

If cotton seed meal is worth \$25.00 a ton as a foodstuff, and there are few who are competent to pass upon its merits that will not admit its advantage as a foodstuff over any concentrate on the market at this figure, we are certainly losing \$20,000,000 a year by exporting it, as we are receiving nothing for the enormous amount of fertilizer it contains, and it is for the purpose of directing the attention of our farmers to this enormous annual loss that these figures have been presented, as they illustrate one of the ways in which we are needlessly prostituting cotton seed meal and losing a great part of the benefit which nature intended we should enjoy from one of the by-products incident to the production of the fleecy staple.

In the last thirteen years we have exported 6,290,000 tons of cotton seed meal, containing 880,600,000 pounds of nitrogen, which at 15 cents a pound, is worth at least \$132,000,000. It is an axiom that we can not continually take from a given quantity of material and have anything left. We have been taking away from the soil supplies of nitrogen and other essential forms of plant food for many years, and now we are beginning to reap the result of this wasteful practice. It has always been necessary for us to put probably quite as much nitrogen into



the soil in the form of commercial plant food as we have sold without an adequate return. If it had not been for the natural richness of our soils, we could not have done this, but now that the available stores of plant food which nature had been hundreds of years accumulating, have been used up, we are forced to pursue other methods of practise in order to raise profitable crops. Let us cease the waste incident to exporting more than \$20,000,000 worth of plant food in cotton seed meal as we did in 1907, for which we received no adequate return.

But this is only one of the ways in which we are prostituting cotton seed meal. Attention has already been directed to the enormous loss incident to the use of seed so largely as food or fertilizer, since the oil contained therein is of no benefit in crop production. The 2,068,665 tons of seed which were kept on the farms in 1907, would have yielded ordinarily, 840,912 tons of cotton seed meal and over eighty million gallons of oil. This meal, if rightly handled, should have been worth as feed and fertilizer, \$50.00 a ton, or \$42,045,600. It may be urged that this is a very high feeding value, but suppose it is cut in two, we have the sum of approximately \$21,000,000, and yet we have retained in the meal all the fertilizing and food value of these two million and more tons of seed, while we have turned into the channels of commerce a product in the shape of oil, worth over \$33,000,000 a year. There should be a fair basis agreed upon between the oil mills and the farmer, so that this enormous amount of money could be saved to the farmers of the South. Nature has given us a seed of marvelous utility, but apparently, we are dissipating by far the greater part of its actual value, and just so long as we continue this needless extraordinary and unjustifiable waste, just that much longer will we have to bear the burden of an ever-increasing annual outlay for commercial plant food.

In Georgia, in 1907, 815,677 tons of seed were produced. Of this amount 381,399 tons were crushed, or 46.8 per cent. of the crop. From the crushed seed there was manufactured 155,922 tons of meal and 135,969 tons of hulls. The hulls are low in plant food, but of course were fed at home for the most part. What proportion of the meal was exported or sent North can not be definitely stated, but one oil mill man reported to the writer this year that of 2,500 tons put out by his mill up to that time 2,000 tons had gone North, 100 tons were sold for foodstuff in the State, and 400 tons for fertilizer. If this represents the figures available for even a small percentage of our oil mills, what a stream of gold is passing out of the State and not bringing an adequate return.

This article has not been written in a spirit of captious criticism, but rather to point out the great economic loss which we are now suffering from a failure to utilize one of the great gifts of nature according to the dictates of science.

ANDREW M. SOULE.

Georgia State College of Agriculture.

#### THE VALUE OF RED CLOVER.

*Editor Southern Planter:*

Many farmers do not realize the important place which red clover should take in the crop rotation in the Northern States. Just as the crimson clover and the cow pea have been termed the mortgage lifters of the South, so

the common red clover has brought prosperity to the Northern farms, where it has a permanent place in the crop rotation.

We have heard much of late about the wonderful alfalfa plant, which under suitable conditions, is probably all true, but to judge by the number of disgusted farmers throughout the Northeastern States, it evidently takes more labor and care to grow this plant than the average farmer is willing to devote to its culture. If one-half the energy which has been expended in attempting to teach the farmers to grow alfalfa, had been spent upon the common red clover, the country would be much better off to-day.

The failure in the growth of alfalfa is usually due to lack of proper conditions and the very same conditions which are necessary for the growth of red clover are needed for the growth of alfalfa, only "more so." This is not intended to discredit the alfalfa plant, which has its place in farm economy. This place is not in a plan for the restoration of a run down farm, and our teachers have been going too fast when they attempted to teach the farmer how to grow alfalfa, when he could not grow red clover successfully, which is like teaching a child how to read before he knows his alphabet.

The path of least resistance is to bring up the fertility of a farm by the growth of red clover and fertilizers, and when the farm is in a proper condition, then sow alfalfa.

The objection of many farmers to red clover, that it does not stay in the land, is really the chief argument in its favor, for it necessitates the frequent turning under of the clover sod, which, through the deep roots, has subsoiled the hard ground better and cheaper than any subsoil plow, obtains the expensive nitrogen from the atmosphere free of all cost, improves the mechanical condition of the soil by adding vegetable matter and ensures a good yield for the following crop, for any farmer will tell you that when he can get a good clover crop, he can grow anything else.

Probably the best rotation to increase the value of a rundown farm and at the same time pay taxes and interest and provide food for the farmer and his family, is a three years one, beginning with a hoed crop of corn or potatoes, followed with oats or wheat and seeded to red clover, which is cut one year and the process repeated. By supplying lime, phosphoric acid and potash, a catch of clover can be ensured. Since ashes are often unavailable, the needed potash can be obtained in a mixture of 1,200 pounds of lime, and 400 pounds muriate of potash. To this should be added 400 pounds acid phosphate, bone meal or basic slag. Or the lime can be applied broad cast at the rate of a ton per acre, and a good ready mixed fertilizer used, such as a 2-8-10 (2 per cent. nitrogen, 8 per cent. available phosphoric acid, and 10 per cent. actual potash)..

It should be noted that owing to the tendency of ashes to increase the liability to scab, the ashes or lime should not be applied the year when potatoes are planted.

After the farmer has carried on several complete courses of this rotation, he will find that his land has doubled in productive capacity. When he now wishes to grow alfalfa, he will find both the chemical and mechanical conditions suitable. The inoculation can be obtained either by sow-

ing a few pounds of alfalfa seed each year with the clover, or more quickly, by sowing a couple of hundred pounds of soil from an alfalfa field on each acre.

By this means he will obtain a good stand of alfalfa and increase the fertility and therefore the crop production of the farm and make a substantial profit each year while men who listen to the glowing accounts of its too enthusiastic advocates are attempting to grow alfalfa upon their poor farm, find that they have gone to great expense, lost the use of their land, and in the majority of cases, get no alfalfa, or anything else in the end.

G. FRED MARSH.

Crimson clover and cowpeas in the South can do all and more than red clover can in the North, and can do it more quickly, as both crops can be grown in the same year and thus increase the productive capacity of the land twice as fast as red clover. Red clover has, however, a place on the Southern farm, and should not be neglected there. It should be sown every time grass is seeded. It will give an increased crop the first year and in its death and decay, the following year, provide food for the further improvement of the grass sod.—Ed.

#### THE PLOW QUESTION.

*Editor Southern Planter:*

I have been following the plow question in the Planter for about a year, and as the matter still seems unsettled, I concluded to add my mite. I have used and have had used on my farms in West Virginia and Pennsylvania, as well as on my plantations in Virginia, about all kinds of plows that have been mentioned except the Disc. The best general purpose plow that I ever used is the South Bend plow. I tried the Oliver, but sent it to the junk pile with a lot of others. I want no better plow for general purposes than a South Bend. At least a 14 or 16 inch bottom, with rolling coulter kept good and sharp. With such a plow, I have plowed land in August with last years' corn stalks still standing and weeds of all kinds as high as the horses backs, and just about as thick as they could stand and a heavy bottom growth of wild morning glories and bell vines, and without using a chain or dragging them down, the plow turned them all under nicely and scarcely ever choked. I have plowed under a very heavy crop of peas after they were dead and plowed as heavy crimson clover as I ever saw grow. It was lodged and tangled in every way, but the plow put it under to perfection. Of course it takes a team to pull that kind of a plow. The Goats and Jack rabbits that they pretend to plow with in this country can't do it. For a 16-inch plow you will need a pair of 1,600 pound horses or 1,400 pound mules, and to keep the plow sharp and properly adjusted. Set it to run not less than 8 inches deep; 10 to 12 is better, and it will do the work. I have plowed out with such a plow, old swamps, full of bulrush stools and iron weeds that no other plow would touch, and plowed right through honey suckle thickets (where no other plow would go at all), and did good work. Brother farmers, get a plow of this kind, and a good team, and your plow troubles will cease.

S. S. SMITH.

Prince Edward Co., Va.

This discussion seems now to have found advocates

for almost every plow on the market. The truth is, that what is most needed is a strong, heavy team and proper adjustment of the plow. Given these and most modern plows will do good work. We are, however, strongly of opinion that the plow of the future will be on the Disc principle. A rolling cutting edge must, of necessity, work more easily and effectively than a bursting tool in wedge form, which is the scientific principle of the ordinary plow. Disc implements of all kinds commend themselves to intelligent thinking farmers as being more effective and less burdensome to the teams than the old forms.—Ed.

#### CROP ROTATION.

*Editor Southern Planter:*

I will give, in brief, my system of crop rotation on my Riverside Farm, which may interest some of your readers.

I raise more sheep than any other kind of stock, for the reason there is more money in them for me. Last year my grade Dorset ewes averaged \$8.20 for wool and lambs. Just here I will say that long since I have taken Professor Massey's advice with reference to dogs. I do not raise my sheep at my neighbor's expense, and I do not propose keeping their dogs at my expense. When it is a case of deciding between sheep and dogs, I give it to the dogs—in the neck!

The most of my farm is kept in permanent pasture and I only cultivate land on which can be used up-to-date machinery. My cultivated land is divided into three fields, on which I rotate corn, oats and cowpeas. The corn is cultivated shallow and level, and at the last cultivation I sow crimson clover and rape, on which I run sheep after the corn is harvested. I follow the corn with spring oats which are cut in the stiff dough state and put up like clover or timothy. As soon as the oats are harvested the land is put in good shape with a cutaway harrow and sown to crimson clover and rape. The rape makes excellent pasture for sheep during the fall and early winter and the crimson clover can be pastured until the first of the following June, when it is turned for peas. In this section it is best to sow cowpeas from the first to the twentieth of June. I sow one bushel of black cowpeas and one-half bushel of soja beans to the acre. The soja beans are a great help in holding up the peas. I usually cut three tons of well cured pea hay to the acre. The peas are cured around poles on which cross pieces are nailed to hold them off the ground. I often put peas on poles the same day they are cut, but if the weather is favorable they are left to cure until the next day. When the peas are on poles the cutaway harrow is run over the stubble and about two bushels of rye sown to the acre. The rye furnishes good sheep pasturage until about the middle of the following April, when it is turned for corn. I use fertilizer containing phosphoric acid and potash on peas, and this is the only crop on which commercial fertilizer is used. All the manure from the farm is put on land which is to go in corn. I get a crop of peas, corn and oats each year, keep the land protected during the winter, have something green to turn under and get an abundance of pasturage for my sheep at a season when it is mostly needed.

It is superfluous to say my land is growing more productive each year. My motto—develop, build up, improve stock and land.

L. C. FELTS.

Carroll Co., Va.



## Trucking, Garden and Orchard.

### WORK FOR THE MONTH.

Irish potatoes should be dug as they become mature. If the skin will not rub off with the thumb and finger the tubers are ripe enough to dig. The late planted crop should be kept growing until frost threatens. Spraying with Bordeaux Mixture will help to keep the vines healthy and fresh, and this means better and more potatoes. Dig potatoes only when the soil is dry so that it will leave the tubers clean. Let lay on the ground an hour or two after being dug, if the sun is not too hot, and then gather and spread out in a shed or on the barn floor to dry. When dry they may be stored either in a root cellar, where they can be kept in the dark and where frost will not touch them. The temperature should be kept as low as possible just to keep free from frost. If you have not convenience for storing in a cellar the tubers will keep well put up in pies or kilns on high, dry ground. They should be put on a layer of straw and have straw over them and a few boards be placed on the straw to throw off the rain. Leave them in this way until they have passed through the sweat and the time for frost is near and then cover the straw with five or six inches of soil beaten solid and they will keep all winter.

Sweet potatoes should be dug as soon as frost cuts the vines. Rake off the vines as soon as they are frosted, even if you do not dig the potatoes, as the decaying vines may injure the tubers. The sooner, however, the potatoes are dug after the vines are cut, the better. Dig on a warm dry day when the soil is dry and let the roots lie out for a few hours to dry off and then haul in and store. Sweet potatoes should be handled as carefully as eggs, as bruised ones will not keep. Sort out all damaged and diseased tubers and use them at once. The others should be stored in a dry cellar where the temperature can be kept at or about forty-five or fifty degrees. They are best stored in slatted bins holding five to ten bushels each. If provision can be made for heating up the temperature of the cellar to eighty or ninety degrees for a day or two immediately after the potatoes are stored, this will cause them to pass through the sweat and dry off quickly and they will keep better. If no such cellar or root house is available, the potatoes may be kept in pies or kilns holding twenty-five to thirty bushels each. They should be bedded on dry pine tags or straw and be covered thickly with these and with boards until they have sweated out and then be thickly covered with dry soil. In small quantities they may be stored in dry sand in a room which can always be kept at an equable temperature of fifty or thereabouts.

Celery plants may yet be set out in the Southern part of this State and further South. Those set out last month should be pushed on in growth and as they grow a little soil should be drawn up to them, or they should be tied round loosely with soft cord, or, better, raffia fibre, to keep the leaves upright until the time to earth them up for bleaching. Do not do this until next month

or November, when the weather is cool and sufficient growth has been made.

Plant sets of the Queen and Potato onions about the middle of the month for early green onions. Put the fertilizer in the furrows and bed on it and then plant the sets deeply so that when the earth is drawn away in the spring they will be on the surface.

Late sown salsify should be cultivated frequently to force growth. This late sown crop makes the best roots for winter and spring use.

Beets should be drawn and stored for winter use before the frost cuts the tops. They can be stored in a root cellar where frost will not reach them or be put up in kilns or pies like Irish potatoes.

Sow Early Wakefield cabbage seed about the middle of the month for plants to set out in November and December.

Lettuce plants from seed sown in August should be set out in the frames for the November and December crop. Keep the lights on until the plants have commenced to grow, shading them to keep out the sun. After the plants commence to grow remove the lights until cold nights come. The frames should be heavily manured with good rotten manure and later a dressing of high-grade fertilizer be applied at the rate of one thousand pounds per acre. It is well to take out the old soil from the frames and put in new sweet soil before setting the plants and thus avoid the risk of injury by fungoid diseases, which may have been present in the frames during the growth of the spring crop.

Late fall cabbage plants should be set out at once in rich moist land and growth should be encouraged by frequent cultivation and irrigation if the weather be dry. These should head up in December.

### SELECTING SEED CORN.

Now is the time to select your seed corn for next year's crop. Go carefully through your fields and select, not merely from the most prolific stalks, but from the stalks which are the best types of the corn you wish to grow. A medium tall stalk with strong growth and showing a high condition of vitality, especially after the dry season we have had, is better than a tall, slender stalk. Select ears set low down on the stalk and be careful in the type of ear selected. Let the ears be all of about one size and thickness and be well filled on the tips and butts as far as can be seen. Mark all these and leave to mature on the stalk.

Dr. N. S. Mayo, for the past five years Chief of the Department of Animal Industry of the Republic of Cuba, has accepted the chair of Animal Husbandry and Veterinary Science in the Virginia Polytechnic Institute, Blacksburg, Va., and will take up his work there September 1st.

### A FEW REMARKS ABOUT PACKING APPLES.

*Editor Southern Planter:*

During the month of September, the bulk of the apple crop will be packed, and all indications point to growers being able to sell their crops at satisfactory prices; the crop in this State is much smaller than that of last year, being estimated at not more than 35 per cent. of a full crop, while some orchards are heavily laden, great numbers have none, or not enough to count. The crop in the United States is also reported less than last year; while Canada, and especially Nova Scotia, have a large crop, yet owing to having to pay a tariff of 75 cents per barrel, they cannot affect our market appreciably. There is no doubt that first-class apples should, and will, bring high prices, but care must be taken that they are up to grade marked on package. The best way to sort and pack apples is over a packing table, and never put them on the ground at all; by this means the crop can be handled more quickly, and with less loss from bruising; I never heard of anyone after once using a packing table, going back to the old method.

The packing associations organized in this State last year by members of the Virginia State Horticultural Society gave such satisfactory results, that great interest is being taken in their development, and there is no doubt that this will be the means of establishing a greater demand for Virginia apples, the only drawback hitherto having been the buyers fear of not getting apples up to grade, under which they were sold. When these associations pack a crop association packers are sent to pack any crop handled by the associations, and only on that condition will the association's guarantee of grade be stamped on the packages. Every buyer of apples thus packed last year, expressed himself as better satisfied than he had ever been before, and said he wanted to buy again. One man whose letter I read, offered to buy the whole crop thus packed this year. There was not a barrel last year that was not sold at a higher price than current prices being paid by buyers to independent packers.

The State Horticultural Society is arranging to make another exhibit of our apples at the State Fair at Richmond, October 4 to 9; their exhibit last year having produced very satisfactory results as an advertisement of Virginia apples. In addition to the collection shown by the Society, members are invited to make independent exhibits in the competitions for premiums offered by the Fair Association. If such exhibits are made with identification cards issued by this Society attached, such names will be printed and distributed by the Society's representative in charge, thus giving our members free advertising among buyers.

WALTER WHATELY,

Secretary Treasurer Va. State Hort. Society.

Crozet, Va.

### DO NOT SHIP INFESTED FRUIT.

*Editor Southern Planter:*

Virginia apples have won an enviable reputation in foreign as well as home markets. Such a reputation is worth much in dollars and cents to the growers of fine fruit, and both growers and shippers should put forth every effort to see that this reputation is not impaired

by any lack of care and forethought on their part. Careful attention should be given to the growth of the fruit, spraying, packing and all other steps necessary, in order to insure that the fruit will reach the market in the very best possible condition. We should put forth every effort possible to extend our markets, as well as to hold those we now have.

The San Jose scale is, no doubt, one of the most important factors in this market proposition, as a number of countries in Europe, notably: Germany, Belgium, Austria, Hungary, France, Switzerland, Turkey, etc., prohibit the importation of fruit infested with this insect. Germany threatened at one time to prohibit the introduction of dried fruit, for fear of its carrying San Jose scale. They were, however, induced to withdraw from this position. Thus it will be seen that it is absolutely necessary that apples intended for export should be free from San Jose scale.

A friend told me recently that in selling canned peaches, a few years ago, he purchased a few cases from a neighbor, to fill out a car load and that when the car was examined by the purchaser, the first can examined proved to be tomatoes, causing the whole car to be rejected. He went at once to Baltimore, where the fruit had been sold, and spent \$60.00 in addition to his traveling expenses to have every can examined and re-processed, without finding another can of tomatoes in the entire car.

This shows what may result from shipping a few barrels of apples infested with San Jose scale, but in this case the result might be far more disastrous. Some of these countries are very anxious to prohibit the sale of American apples and await the slightest pretext to do so; hence, in addition to the loss on a single shipment found infested, the matter might gain publicity and in that way injure the market for future shipments, or the government of the country in question and others hearing of the matter, might make stringent regulations, which would practically amount to an embargo against American fruits.

Fruit infested with San Jose scale should not be placed on our home markets, but it is of far more consequence to prevent such fruit from being shipped to other markets, which are not so nearly under our control.

The matter is of vital importance, especially to our apple industry, and it is to be hoped that apple growers and shippers alike, will unite in a most determined effort to prevent the shipment of infested fruit. The Crop Pest Law might be extended to cover this question, and thus an organized effort with the support of law be made, to prevent the shipment of such infested fruit.

J. L. PHILLIPS,  
State Entomologist.

Blacksburg, Va.

### APPLE PACKING.

We are asked by the Shenandoah Valley Fruit Growers Association to publish the following information:

Mr. M. F. Gilkeson, of Staunton, Va., will attend to the business of the Shenandoah Valley Fruit Growers Association of Staunton, Va., this year. For information in regard to the Association, call on or address Mr. Gilkeson at Staunton, Va., or the Secretary at Blacksburg, Va.

While final steps of organization have not been taken



in all cases given below, this will be done in a very short time and inquirers in the territory adjacent to the points should call on the officers, whose names appear below:

Stuart's Draft Division, E. D. Kendig, Secretary, Stuart's Draft, Va.

Staunton Division, M. F. Gilkeson, Staunton, Va.

Rockbridge Division, Frank T. Glasgow, Lexington, Va.

Botetourt Division, J. Coles Terry, Secretary, Bent Mt. Va.

Montgomery Division, J. H. Broce, Secretary, Blacksburg, Va.

Wythe Division, W. E. Snavelly, Crockett, Va.

#### FRUIT GROWERS OF DIFFERENT STATES UNITE IN CO-OPERATIVE MOVEMENT.

*Editor Southern Planter:*

Missouri and New York United; Pennsylvania, Georgia and Connecticut expected to join.

The recent success of the co-operative movement notably in Georgia, the west and middle west, etc., has given this method of handling produce a great impetus. The growers of New York recently met and formed an association with a capital stock of \$40,000.00. A little later, a second meeting was called at Olcott Beach, at which growers from the Ozark Mountain section, Pennsylvania and Connecticut were also present. Arrangements were perfected by which the Ozark Fruit Growers' Association will unite with the New York Association in establishing a general clearing house, and using the same selling agents for both exchanges. Fruit growers representing similar organizations in Georgia, Pennsylvania and Connecticut expressed themselves as desirous of extending this interstate Co-operation to their respective States.

The growers generally realize the necessity of a large capital stock to enable them to handle the volume of business that must necessarily be taken care of, in order to make their organization a success. This is better told in their own words, however, and we quote below from Fruitman's Guide:

"The Growers' and Shippers' Exchange (of New York), with a capital stock of \$40,000.00, held another meeting last Saturday at Olcott Beach. It was also agreed that the capitalization of each local branch should be from \$2,000.00 to \$5,000.00.

The Georgia Exchange was organized last spring with a capital stock of \$100,000.00. Mr. J. H. Hale, one of their largest growers was present at the meeting mentioned above, and is reported by the Fruitman's Guide as proposing co operation between the New York and Georgia growers, and with the Connecticut growers.

In commenting on this meeting, the Guide continues, "Mr. Hale stated that the first year of the Georgia Fruit Exchange has shown very flattering results, and stated that its work has resulted in realizing more money for the grower for 2,000 cars distributed this season, than was realized last year (1908), by the growers for 6,000 cars. He said that too much emphasis could not be given to proper distribution, and that proper distribution had been the key note of the success obtained by the Georgia Fruit Exchange in the first year of its existence."

M. F. GILKESON,

President Shenandoah Valley Fruit Growers' Association.  
Augusta, Co., Va.

#### NEW YORK FRUIT GROWERS ORGANIZE.

According to the scheme of organizations, a company is to be incorporated with a capital of about \$40,000, of which 20 per cent. is to be paid in at once as working capital. The remainder is to be held as treasury stock. The shares are to have a par value of \$100.00. The stock is to be fully paid and non-assessable. Each member must purchase at least one share. The limit of treasury stock to be sold to any one person is to be decided by the Board of Directors. New York State growers and shippers are eligible to membership, but must be approved by the Board of Directors. The Exchange is to handle products for the members on a 5 per cent. basis, and for others upon a basis to be fixed by the directors.

Efforts are to be made to organize local associations of growers, such associations to be stockholders in the parent organization and market their products through the parent organization, but using their own brands, methods of packing, marketing, grading and loading cars. All associations, firms, and individuals must be responsible for all goods handled by them, and truly mark them before they are delivered to the parent organization for disposition. It is emphasized that the success of other associations has been principally due to the absence of deception in packing or offering goods for sale, to good advertising and to the proper distribution of products.

The scheme of the organization was read and discussed at the forenoon session. In the afternoon the session was opened by Floyd Tenny, of the United States Department of Agriculture, who gave an outline of the work that has been done by co-operative selling unions in California and Florida, in the picking, packing and shipping of citrus fruits. He discussed the difference between the various unions, and also described the plan and methods of the California Fruit Growers' Exchange, the principal selling organization of its kind in the world.

Dr. Whitman H. Jordan, director of the New York State Agricultural Experiment Station, at Geneva, discussed the handicap of co-operation. One of these, he said was lack of confidence among the members. He pointed out that the great financial deals have all stood on faith. He said that co-operation brings to the front the best man. He also said that the desire of some packers to dispose of poor fruit at high prices had been a handicap to many associations. He pointed out that the organization was necessary to secure proper freight rates, and urged unity of action in all that was done by the Association.

William C. Berry said Western New York orchardists had neglected the marketing end of the fruit business. This section of the country, he said, is far behind many other sections in that respect, despite the fact that all kinds of fruit from Western New York have a high reputation in the markets of the world. He deplored the lack of organization and said he hoped the proposed association would be formed. Prof. L. B. Judson, of Cornell University, Ithaca, described the workings of the selling associations in the Hood River district of Oregon.

A motion was then made that a company to own, maintain and operate a co-operative selling exchange, be incorporated according to the scheme proposed. Four or five seconded the motion, and it was carried by unanimous vote. Adjournment followed immediately. The de-

tails of co-operation, together with the election of officers, will be looked after by the Board of Directors.—Fruitman's Guide.

### DESTROYING THE CABBAGE WORM.

*Editor Southern Planter:*

A number of Pennsylvania cabbage growers wrote to Prof. H. A. Surface, the State Zoologist, for instruction in regard to destroying the cabbage worm, which has become quite a serious pest of the cabbage crop. For the benefit of all growers, State Zoologist Surface has given out the following information:

"The cabbage worm is most easily destroyed by the use of an arsenical application. Most of our successful cabbage growers use about two pounds of arsenate of lead in fifty gallons of water or one pound of Paris green in the same amount of water. The arsenate of lead sticks better than the Paris green, especially on cabbage leaves, and is to be preferred. The liquid bearing the poison should be blown well around the cabbage leaves with a good fine spray nozzle, applying it as a fine mist but not in drops. It sticks much better when put on in a fine mist than when poured on from a sprinkling can or otherwise applied in drops.

"If it be not convenient to apply the poison as a spray it can be mixed with thirty times its bulk of Paris green or air-slaked lime, and applied as a dust. The best results from this will come from making the application in the evening, or in the morning while the dew is on. The use of arsenites in the dust or powdered form is recommended, especially on small premises where the owner does not have a spray pump.

"There is no need to fear poisoning consumers by applying arsenical poisons to cabbage for the cabbage worms. The heads form from the inside and the constant tendency of the growth is to spread or open the poisoned leaves, and thus they are gradually removed. Also a few of the outer leaves are removed in preparing cabbage for the table, and thus whatever poison may adhere to it is taken away.

"I have never known of a case of a person being poisoned by the spraying or dusting of cabbage, and, indeed, it is estimated that it would take two or three hundreds heads to carry enough poison to have any serious effect on a person. The extensive growers all over this State resort to poison to keep the chewing pests in check, and especially apply this for the green cabbage worm, the same as for the potato beetle."

### CONTROL OF PEACH YELLOWS IN THE NURSERY.

*Editor Southern Planter:*

I beg to call attention to an address made before the American Association of Nurserymen at Milwaukee, June 12, 1908, entitled: "Peach Yellows As It Affects Nurserymen." This subject is of special importance to all nurserymen who expect to continue the sale of peach trees in Virginia.

You will find by a perusal of this address that orchardists in this State, as well as in other States, have suffered severely from the disease known as peach yellows. You will also find that this disease is spread to a considerable extent on nursery stock. In fact, data collected by the

writer after the above address was printed (and presented to the Botanical Section of the A. A. A. S. in Baltimore, December, 1908), and since that date, brings out still more definitely the fact that contagion comes to the nursery both through the pits and buds used in propagating nursery stock and goes out thence to the orchards. You will also find that peach yellows is now prevalent in many of the sections from which natural peach pits have been collected in the past.

The fruit growers of this State are putting forth a strong effort to hold this serious disease in check and earnestly request the aid of nurserymen in the matter. The nurserymen can help by growing their stock absolutely free from this trouble.

You will find from the above mentioned paper that California growers attempt to keep the disease out of that State by prohibiting the use of plants grown in territory where the yellows is known to exist and by using pits from California canneries (the disease is supposed not to exist in California) for growing their seedlings.

We took the precaution last summer to send a representative to Georgia to look into conditions there in regard to peach yellows. Arrangements were also made to collect pits in sections of this State, as well as from Georgia, where peach yellows has not been found.

Some of these Virginia pits (from improved varieties) were carefully dried out as collected and gave good results in the nursery, but we have had some complaint as to the results obtained with the Georgia pits. In my opinion, the difficulty has been in getting them collected and dried out properly. We are confident that if the proper varieties are collected and dried out properly they will give excellent results for nursery purposes. In fact, some of the largest growers in Georgia tell me they use pits from the canneries only, and that they collect and cure them out themselves. Almost any variety that produces sound pits should be suitable for nursery purposes.

We are prepared to take any steps necessary along this line to protect our fruit growers from this disease and, as mentioned above, confidently expect the co-operation of nurserymen both within and without the State, who expect to sell their stock in Virginia; hence, we request all persons who expect to sell peach trees in Virginia to at once take up the proposition of obtaining, first, buds for propagating purposes from healthy trees; second, peach pits from healthy trees; third, the proposition of cleaning out, absolutely, all trees diseased with peach yellows, within two or three miles of their nurseries.

In the purchase of pits, we are of opinion that nurserymen should ask that samples be submitted and demand that the lot purchased be equal to the sample. This matter should be taken up at once.

We believe that if these plans are carried out carefully the spread of the disease through nursery stock can be eliminated. We invite correspondence along these lines.

J. L. PHILLIPS.

B'acksburg, Va.

State Entomologist.

I am heartily with you in your position regarding the turkey buzzard, and wish they might all be destroyed.

Fauquier Co., Va.

O. A. THOMAS.



## Live Stock and Dairy.

### SCORE CARD SYSTEM OF DAIRYING INSPECTION.

Editor *Southern Planter*:

I notice in the August issue of the *Southern Planter* a sharp criticism of the score card system of dairy inspection, which is called a "ridiculous system." You say: "This whole score card business is a farce and a fraud. \* \* \* All that stands between the dairyman and prosperity or ruin is the 'say-so' of one of these so-called inspectors, men who have had no skilled training in the business and who can just as easily score 50 as score 75 and give just as good a reason for the one score as the other."

Much of my work of recent years has been in connection with the score card. I want to say a word in its defence. It has been adopted in many cities all over the country and gives excellent satisfaction. It has been warmly commended and, speaking from memory, you are the first person who has criticised it.

The distinctive and essential feature of the score card system is the giving of a numerical rating to the different items which are necessary in the production of milk. It is believed that such words as "good" and "bad" are relative, largely reflecting the standard in the mind of the speaker, and practically valueless in describing the condition of a dairy. A mathematical expression is much more precise.

The particular form of score card used is another matter. In the evolution of the system different cards have been prepared and used. The following is now recommended and used by the National Department of Agriculture, and has been endorsed and adopted by the National Association of Official Dairy Instructors:

#### Cows.

Health .....	6 .....
Apparently in good health.....	1 .....
If tested with tuberculin once a year and no tuberculosis is found, or, if tested once in six months, and all reacting animals removed.....	5 .....
(If tested only once a year and reacting animals found and removed, 2.)	
Comfort .....	2 .....
Bedding .....	1 .....
Temperature of stable.....	1 .....
Food (clean and wholesome).....	2 .....
Water .....	2 .....
Clean and fresh.....	1 .....
Convenient and abundant.....	1 .....
Stables.	
Location of stable.....	2 .....
Well drained.....	1 .....
Free from contaminating surroundings .....	1 .....
Construction of stable.....	4 .....
Tight, sound floor and proper gutter.....	2 .....
Smooth, tight walls and ceiling.....	1 .....
Proper stall, tie, and manger.....	1 .....
Light: Four sq. ft. of glass per cow.....	4 .....

(Three sq. ft., 3; 2 sq. ft. 2; 1 sq. ft. 1. Deduct for uneven distribution.)

Ventilation: Automatic system.....	3 .....
(Adjustable windows, 1.)	
Cubic feet of space for cow: 500 to 1,000 feet .....	3 .....
(Less than 500 feet, 2; less than 400 feet, 1; less than 300 feet, 0; over over 1,000 feet, 0.)	

#### Utensils.

Construction and condition of utensils.....	1 .....
Water for cleaning .....	1 .....
(Clean, convenient, and abundant.)	
Small-top milking pail.....	3 .....
Facilities for hot water or steam.....	1 .....
(Should be in milk house, not in kitchen.)	
Milk cooler.....	1 .....
Clean milking suits.....	1 .....
Milk Room.	
Location of milk room.....	2 .....
Free from contaminating surroundings, 1	
Convenient .....	1 .....
Construction of milk room.....	2 .....
Floor, walls and ceiling.....	1 .....
Light, ventilation, screens.....	1 .....

Total .....

40 .....

#### Cows.

Cleanliness of cows.....	8 .....
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#### Stables.

Cleanliness of stables.....	6 .....
Floor .....	2 .....
Walls .....	1 .....
Ceiling and ledges.....	1 .....
Mangers and partitions.....	1 .....
Windows .....	1 .....
Stable air at milking time.....	6 .....
Barnyard cleaned and well drained.....	2 .....
Removal of manure daily to field or proper pit .....	2 .....
(To 50 feet from stable, 1.)	

#### Milk Room.

Cleanliness of milk room.....	3 .....
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#### Utensils and Milking.

Care and cleanliness of utensils.....	8 .....
Thoroughly washed and sterilized in live steam 30 minutes.....	5 .....
(Thoroughly washed and placed over steam jet, 4; thoroughly washed and scalded with boiling water, 3; thoroughly washed, not scalded, 2.)	
Inverted in pure air.....	3 .....
Cleanliness of milking.....	9 .....
Clean, dry hands.....	3 .....
Udders washed and dried.....	6 .....

(Udders cleaned with moist cloth, 4;  
cleaned with dry cloth at least 15  
minutes before milking, 1.)

#### Handling the Milk.

Cleanliness of attendants.....	1 .....
Milk removed immediately from stable.....	2 .....
Prompt cooling (cooled immediately after milking each cow).....	2 .....
Efficient cooling; below 50° F.....	5 .....
(51° to 55°, 4; 56° to 60°, 2.)	
Storage; below 50° F.....	3 .....
(51° to 55°, 2; 56° to 60°, 1.)	
Transportation; iced in summer.....	3 .....
(For jacket or wet blanket allow 2; dry blanket or covered wagon, 1.)	

Total ..... 60 .....

Score for equipment.....+ Score for method.....=  
..... Final score.

Such matters as light 4, space per cow 3, small top pail 3, cooler 1, milking suits 1, inverting utensils in pure air 3, cleanliness of milking 9, cooling 5, storage 3, transportation 3—35 in all—are so explained that even a man without “skilled training” could score accurately. When the cleanliness of a stable floor is considered, individuality has some chance; one might consider a floor half clean and another only quarter clean—their judgment would vary half a point. But with this card in hand it is impossible to conceive of conditions under which an inspector could “just as easily score 50 as score 75 and give just as good a reason for the one score as the other.” An inspector who knows much of dairying can be of great assistance to the dairymen when making his inspections by explaining how to remedy defects and by giving instructions in many matters of detail that will come up for consideration. But with the score card system more than the mere “say-so” of the inspector determines prosperity or ruin.

One of the most recent dairy publications—Pure Milk and the Public Health, by Professor A. R. Ward, says, “The score card represents the inspector’s very carefully analyzed opinion of the condition of the dairy. \* \* \* The tendency to neglect details in the inspection is checked for the inspector has before him comprehensive suggestions. If he is inexperienced any tendency to underestimate the importance of various details is obviated. In making recommendations his advice is made more weighty by the score card to which he may refer the dairyman.”

I have recently been in Birmingham, Alabama, in connection with the introduction of the score card system of inspection. The Age-Herald, after a careful investigation, said: “When it is understood by the dairymen it will do much to elevate the general average in every respect.”

The universal verdict is that the score card system improves conditions with a minimum of friction and hardship. Being an open, public, written record, it automatically protects the dairyman, prevents partiality or erroneous scores, secures results for the health officer, and has an educational influence.

GEO. M. WHITAKER.

Bureau of Animal Industry, Washington, D. C.

The score card in the hand of a skilled scientific ex-

pert like our correspondent can no doubt be used with justice to the dairyman, but such a skilled expert does not need this adjunct to enable him to say at once on inspecting dairy stock and equipments whether the owner ought to be allowed to ship his products anywhere. By intuition and familiarity with his work he can at a glance almost see whether the stock is healthy and the equipment satisfactory and the score card is unnecessary. Given such inspectors our farmers would have no trouble which they could not meet and overcome. But our city inspectors are not such men. They are mostly political, “dead beats,” who owe their positions to their “pull,” and who are neither scientifically educated nor practically familiar with farming and dairy management, and in their hands the score card is simply an instrument of injustice. We are old enough to remember the time when live stock judging at the Fairs was conducted largely on the score card system. It led to great delay and much injustice from the varying views of judges as to the points to be allowed or deducted, and as a result of this “comparison judging” has taken the place of the score card and the experienced expert judge supplanted the novice with a score card in his hand, much to the satisfaction and approval of every one interested. And so, in our opinion, it will be eventually in this dairy problem.

We still maintain that in the hands of inexperienced men the score card can be as easily used to score 50 as 75. The one figure means loss, exclusion from the market; the other means a good business and profit. It is merely a question of giving the minimum or maximum figures on a number of the points enumerated on the card, and what these figures shall be is wholly within the discretion within certain limits of the scorer. To show how such a card can be abused in only point. Recently one of the inspectors in this city, we are informed, on inspecting a dairy herd nearby, seeing “tuberculosis” mentioned on the card, wrote in his report that the whole herd was tuberculous, and this report was filed for the inspection of any one. The inspector never tested the cows for tuberculosis, and, of his own knowledge, could not possibly know that such a disease existed in the herd. Even a skilled veterinarian could not have asserted this without testing. Yet, this gross injustice was inflicted on the owner and the score card was the instigator of it by its suggestion as to the disease. Had he not had the card the idea would, in all probability, never have occurred to him. Again, in another case within our own knowledge, the inspector so manipulated his figures as to allow milk to be shipped into the city from a dairy where the cows were standing on a floor under which there was an accumulation of filth which had drained through the floor large enough to bury the cows almost. An experienced expert would not have permitted such a place to ship milk at all, whatever the score card scoring might have warranted on other points. The whole scoring provided for in the card for “methods” is such as to admit of a wide latitude in discretion. What one man would call “clean” another might call anything but “clean,” and so with “Utensils and Milking.” The exercise of such discretion should not depend on a card, but should be reposed in a man of scientific and expert



training, and such a one needs no card for arriving at a decision. We are unable to agree with our correspondent as to the points on which he says an unskilled man could score accurately. We see room on nearly all the points mentioned for difference of opinion and when the loss of only one point in the total may mean exclusion from the market, it is easy to see how in "35 it may readily happen that this one point is lost and the business be suspended, and yet no just ground exist for such treatment. As we said in our last issue, we have always advocated inspection, and urged the farmers to raise no objection to this, and we know that they are welcoming it, but we want and insist that this inspection shall be in the hands of expert, skilled men like our State Dairy Inspector and his employees who have been educated for the work. Under their fostering hands the dairy business of the State will advance and become a great factor in the prosperity of our farmers, but, in the hands of city inspectors, such as are now exercising their authority like all other "jacks in office" of a similar type, nothing but killing of the business can result. We hear daily of men abandoning it and of others who were preparing to go into it being deterred, and meanwhile the city suffers for want of the milk and cream and the "canned goods man" reaps the profit and the health of the people suffers.—Ed.

#### BLEAK HILL DAIRY FARM.

Out in the mountains of Southwest Virginia, or, to be more explicit, seven miles from Ferrum, in Franklin county, Professor William D. Saunders, State Dairy and Food Commissioner, is conducting a unique experiment at Bleak Hill, his farm. This experiment consists in breeding his own dairy cattle by crossing common grade cows with pure-bred Guernsey bulls. A few years ago Professor Saunders bought quite a number of such cows wherever he could and naturally his collection represented all sorts and conditions of "scrubs." Some showed



A PART OF "BLEAK HILL" DAIRY HERD.

strong Holstein markings, some bore the stamp of Jersey ancestry, but the major part of the herd appeared to be nondescript. His first cross, which produced half-breds, showed fairly satisfactory results, the offspring clearly demonstrating the prepotency of his Guernsey

sires. These half-breds were also bred to Guernsey sires with the result that the three-quarter breeds are as pretty a lot of calves as we have seen for a long time, and,



SPLENDID TYPE OF HALF BRED GUERNSEY.

in a number of cases, an expert from the Isle of Guernsey would pass them as pure-breds. It is quite evident, therefore, that another cross will produce, as far as markings and conformation go, an excellent type of Guernsey milkers. While the type of the animal has been greatly improved, its milking qualities have also been accentuated with a corresponding increase in butter fat production.

At the outset Professor Saunders naturally got a great many unprofitable cows, but, as on his place each "tub stands on its own bottom," it did not take long for the scales and Babcock test to weed out the boarders at "Bleak Hill." A daily record of each cow is kept and



"PASTEURIZED" YOUNGSTERS—CHILDREN OF PROF. SAUNDERS.

the present milking herd of about sixty animals averages very nearly 4 per cent. butter fat.

Professor Saunders finds a ready market for his cream in nearby towns in Virginia and North Carolina. His method of shipping is that in vogue at numerous other dairies and consists simply of cooling the milk down to about 45 degrees and jacketing the cans, and the product, of course, carries safely to any distance. The skim milk goes to the calves.

Professor Saunders is a great believer in pasteurization as a safeguard against contamination or impure milk. His product is, therefore, pasteurized for such customers as want it as well as for family use.

The silo, milk and separator rooms and water supply

are all conveniently arranged for the economical feeding of the stock and handling of the milk. The litter carrier takes the manure out to the spreader from whence it goes to the fields regularly. The water supply, both for the barns and house, is from a hydraulic ram situated some distance off and about one hundred feet lower than the building.

Professor Saunders' mechanical turn led him to install a very simple, though useful, electric plant in connection with an old mill wheel about three-quarters of a mile distant. This convenient and inexpensive plant saws wood, turns the grind-stone, furnishes light and lots of other useful and necessary jobs.

While nominally in the dairy business, Professor Saunders is doing some excellent farming. There is a large herd of stock to be fed the year around and various crops have to be produced in order to do this economically. The silo, of course, figures largely in this feeding arrangement, but when one takes hold of a run down farm, and a mountain farm at that, it takes a good deal of hard work and good farming to bring it up to the point of productivity, which it was our recent pleasure to observe. The hay crop this year was excellent, and the corn crop is as good as we have seen anywhere and we learn that continued seasonable weather has pushed them ahead rapidly. Following T. O. Sandy's advice, a good sprinkling of alfalfa was put in with the grass last fall with the result of a most excellent stand of alfalfa throughout the field with two very good and probably three mowings this year.

As State Dairy Commissioner, Professor Saunders is necessarily away from home a great deal, but he seems to be able to have his orders executed in a very satisfactory manner during his absence. We shall note the continuance of his Guernsey-grade experiment with a great deal of interest and shall, in all probability, have some further results to report later on. SHEPHERD.



FOR THE SILOS.

#### CATTLE FEEDERS' PROBLEM.

*Editor Southern Planter:*

There is cause for congratulation in the rapid strides which are now being made towards the permanent eradication of the cattle tick in the Southern States. The tick, as all stockmen realize, has proved a menace to the progress of animal industries for many years past, and now that the life history of this parasite and means of destroying it have been worked out, the greatest single obstacle to the development of beef production on our cheap lands has been overcome, provided the people take sufficient interest in this matter to insure the hearty co-operation of the State and Federal authorities in pushing forward the work of eradication.

The destruction of the cattle tick is not as serious a problem as many may imagine, for there are hundreds of farms on which pure-bred cattle are kept to-day, where no ticks are to be found, and the difference in the thrift and development of the cattle on these tick-free farms and those infested, tell their own story to the keen observer in a very graphic manner. The fine type of animals developed on farms surrounded by lands which are tick infested, shows that a suitable variety of foodstuffs can be grown, even in the heart of the cotton country, to maintain both beef and dairy cattle of high quality, at a reasonable cost. It would be a comparatively simple matter, therefore, to secure the needed sires for the improvement of our native stocks to that point where they can be made into beef at a profit to the grower, if it were possible to put these pure-bred sires out on lands infested with ticks; but the moment they are removed from the tick-free lands on which they may have been developed, they are subject to tick fever, and in a great majority of instances perish from the same. Suppose, however, they were entirely immune, the tick infesting the young calves and older animals will seriously interfere with their uniform and rapid development—points which are absolutely necessary to economy of production. Hence the tick so long as it exists is a definite obstacle to the progress of beef production. A proper realization of this fact and the beneficial results which will flow from establishing animal industries which will permit a greater diversification of crops than is now possible, will insure the Southern States co-operating more rapidly for the destruction of this miserable parasite which inflicts millions of dollars of loss on the South every year. Since an area probably as great as that of Georgia, was placed North of the quarantine line last year, the practicability of destroying the tick can no longer be called in question. Hence, education along this line is bound to prove as beneficial to our people as anything else that can be undertaken at this time.

So much has been said about the favorable conditions existing for beef production in the South that some may properly question why substantial progress has not been made in this direction. The claims made with regard to a salubrious climate and the ability to produce the most desirable foods for beef production in great variety and at a moderate cost, are founded in facts, which can not be successfully controverted. Why, then, has this industry languished? Simply because the grade of animals which have been fed has been of such an inferior character and so slow in reaching maturity as to render the business unprofitable. The practical man has found this out very often to his sorrow, and has concluded that feeding beef cattle can not be pursued except at heavy loss, even when he has such a wonderful satisfactory concentrate as cotton seed meal available to feed and can purchase his supplies of the same at a reasonable cost.

That the grade of stock has much to do with this question is further illustrated by the fact that feeders in some of the cotton States who have secured a better grade of cattle from Tennessee, have succeeded in finishing them at a good profit and are yet yearly enlarging their operations. The cattle fed are simply grade



animals—the product of pure-bred sires on the native cattle of the mountain sections. These native animals do not differ materially from the cattle found throughout the coastal plains region, and a similar improvement can certainly be effected with pure-bred sires throughout this entire region when the cattle tick is eradicated and the pure-bred sire can be brought in and utilized freely without fear of loss, except the small per cent. which may succumb by reason of some of the common diseases to which cattle are subject.

It has been said that the South can not produce beef cheaply because enough corn is not raised for this purpose. Demonstration after demonstration has been made to show that corn alone is not more satisfactory for beef production than for fattening hogs. As a matter of fact, cotton seed meal and hulls may be utilized as the sole foodstuffs and fed at a profit if the grade of cattle used is of the right type. Hulls, however, are somewhat high, and the farmer can certainly produce roughness at home which will take their place for much less than it will cost him to purchase the hulls. We have advocated the use of cowpeas and soy beans with silage as adjuncts in beef production for many years past, and have maintained that corn was not a cheap food to use, nor was it even necessary to feed it in considerable quantity. This opinion so opposed to the ideas which have held sway for a long time has naturally not been accepted as rapidly and as uniformly as is desirable for the good of the cattle industry, but the force of this argument is gathering strength from year to year, and is being borne out by experiments made by various other investigators. For instance, in tests made at the Tennessee Experiment Station recently, it has been shown that cattle fed on the product of an acre of corn made a pound of beef at a cost of from 6 to 9 cents; while those fed on the product of an acre of soy beans made a pound of gain at a cost of from 2.5 to 3.4 cents; and those fed on the product of an acre of cowpeas, a pound of gain at a cost of from 4.2 to 5.3 cents. These cattle all received some silage. The corn-fed cattle made gain of from .59 to .93 of a pound per head per day; the soy bean-fed cattle, 1.27 to 1.68 pounds per head per day; and the cowpea fed cattle, 1.20 to 1.51 pounds per head per day. These results show that a pound of gain was made for about half as much where cowpeas and soy beans were utilized as where corn was fed. All farmers of experience realize that cowpeas and soy beans are quite as easy to grow as corn and that they leave the land in much better condition for succeeding crops.

The experience of farmers in the vicinity of Augusta, Georgia, shows that on lands containing a fair proportion of sand, and there are thousands of acres of this type of soil in the coastal region, the vetch may be grown profitably and made into hay. Of course, this hay can be sold directly at a good profit to the farmer, but it could be combined equally well with cotton seed meal, and a sufficient amount of beef produced to supply in part at least the home markets. Why not utilize the legume, therefore, to the fullest extent in rebuilding our exhausted soils and in making our animal industries more profitable. It will be proper to digress sufficiently here to say that any or all of these legumes can be utilized

to equal advantage and profit by the dairyman, and yet dairying is an industry quite as sorely neglected as that of beef growing.

These facts should successfully dispose of the theory that corn is essential to beef production. It is true that some of it can be fed advantageously, but it is an expensive concentrate for use on the Southern farm, under the most favorable conditions, and since nature through her law of compensation has afforded the South an opportunity of growing a great variety of legumes which yield both grain and fodder of fine quality, she evidently intended that these crops should be utilized for the maintenance of our animal industries.

There have been some serious mistakes made in the past by those who have attempted to finish beef cattle, and it may be well to call attention to these at the present time. Experienced feeders now realize that it requires about six months in which to finish a well-graded animal properly for a discriminating market. In most instances, our feeders have not fed for more than three or four months, hence the animals were not at all finished; in many cases, simply being "warmed up." It is true they would have made larger gains and presented a better appearance when placed on the market if they had possessed better blood. Nevertheless, with whatever natural defects they may have possessed, they were not properly finished, and the cut on this account when offered for sale, has been so great in many instances as to discourage the feeder. Younger animals should be selected for feeding. The four-year-olds or over can seldom be finished at a profit, because of the slow gains they put on. They have also not been well nourished when young, in a majority of instances, and the growth through life has been slow and often stunted. Hence, they will not finish off quickly in the feed lot. Animals ranging in age from two and a half to three years will afford a much greater profit and finish off to much better advantage than the type so commonly met with.

The full value of roughness in cattle feeding is seldom properly appreciated. For instance, corn fodder, which has been allowed to stand so long in the field that the leaves for the most part have been blown away and the whole stalk exposed to the weather and leached until it is no longer palatable, is thought by many to be a satisfactory form of roughness to use with beef cattle. Nothing could be further from the truth, for it has been shown repeatedly that the form of roughness has a most important influence on the rapidity and economy of the gains. Our own investigations have demonstrated this to be true. The Missouri Station claims that when corn was combined with clover or cowpea hay, it was worth 8.4 cents more per bushel than when fed with timothy. At the same time, it should be remembered that a large consumption of roughness may not diminish the grain consumed, but by stimulating the appetite really call for the consumption of a larger amount of grain. This apparently anomalous condition is due to the fact that the protein in the legume hay, which we have advocated as the proper roughness to use with silage, stimulates the total consumption of food. In spite of this larger consumption of food, however, the gains have been so much

greater, because of keeping the appetite on edge and the animals in a prime condition, that the legume ration has proven more profitable than one where timothy hay or corn stover constituted the principal roughness fed.

The value of shelter in feeding cattle seems to have been greatly overestimated. Cattle will make larger and better gains, according to the consensus of experimental data available, if permitted their virtual freedom. The only equipment needed, therefore, for beef production in the South would be an open shed of sufficient size to shelter the cattle from cold rains in the winter, protect the feed, and afford shade in the summer. Confinement in stables and barns is certainly inadvisable. A serious mistake is often made in trying to get the cattle on feed too rapidly. A very small amount of grain should be used at first, particularly if the animals have been used to running in pasture fields. They will gradually become accustomed to their changed conditions, and when once they come to their appetites, the grain ration can be increased without danger of throwing them "off feed."

Many farmers purchase cattle without regard to market conditions; that is, they frequently pay too much for the grade of animals they are attempting to finish. The farmer should figure on this matter very closely, and though he may not always be able to judge of market conditions six months hence with sufficient accuracy, to safeguard his interests, he can generally size up the situation fairly well. He should at least allow himself a margin of from one to one and a half cents between the buying and the expected selling price. An ever-increasing number of experiments show one cent to be about the narrowest margin on which stall feeding can be followed with the hope of a reasonable profit.

The preparation of the food for stall fed cattle is an important consideration. The troughs and mangers should be kept in a sanitary condition at all times. Care should be taken to place the feed before the animals in the most palatable form, or else they will reject a great portion of it, which increases the cost of finishing very much. Cattle feeding, in other words, consists in much more than putting the animals in an open lot and placing the food before them. Greater care and attention must be given to the preparation of the food as the feeding period progresses, because the appetite of the animal becomes more and more nearly surfeited, and unless special attention is given to this matter, they may get "off feed," which is always a grave disaster to the stockman. It is especially important that the concentrated part of the ration be prepared so as to insure its being assimilated most completely, because it economizes the food and insures larger gains. Greater care must be exercised in the preparation of concentrates for younger animals than for older ones.

One of the most important adjuncts on the stock farm is the hog. They should be kept in sufficient quantity to follow after the animals and clean up any grain which may have escaped digestion. Very often the hogs will show a profit when the steers fail to do so, and though opinion is somewhat divided, we are inclined to think there is little danger from hogs following cattle consuming large quantities of cotton seed meal. We can

only say on this point that several years of experience, in which very considerable quantities of meal were consumed by the steers has failed to result in injury to the hogs following the cattle. We wish to emphasize this matter of paying attention to the hog as an adjunct in beef production, for it is certain that unless hogs are kept behind the animals that from \$1.00 to \$3.00 or even more of profit per steer, depending on the market price of pork, will be lost. An abundant supply of pure water is absolutely necessary in beef production. The cattle should be fed with regularity, kept in quiet and comfortable surroundings, and the feed varied sufficiently to keep the appetite on edge.

Study the market conditions; utilize the best grade of cattle available, and seek to get better ones every year. Adjust your crop rotations and your farm practice so as to enable you to produce, by far the larger part, of the ration at home. Let it consist chiefly of legumes, thereby improving your land and making your profits from beef production more certain. Utilize cotton seed meal and grass as much as possible during the summer months, and then credit yourself with the benefit of the manure accumulating in your feed lots from year to year and which will enable you to save substantially on the purchase of commercial fertilizers, and see if beef production is not a more profitable practice than you have frequently given it credit with being.

ANDREW M. SOULE.

Georgia State College of Agriculture.

### THE DUAL-PURPOSE BREEDS.

*Editor Southern Planter:*

Permit me to correct one or two errors made by your typesetter in my article published in your last issue: Referring to the cow Nominee, I am made to say that the yield of milk at each milking was 7 pounds. I wrote 17 pounds, which is the correct figure.

However, the fault, no doubt, rests on me, since I have been so pushed with work as to be unable to find sufficient time to make my letters or meaning either perfectly clear. In the next to the last paragraph in the third line, conformation would have been a better word than constitution.

I might add anent this beef-milk separate or beef and milk in combination—argument that the Shorthorn has just furnished the English Dairy Show a very acceptable champion in Rothschild's Darlington Cransford 5th. Her daily flow was 82 pounds, 14 ounces of 3.7 per cent. milk; this was 11 pounds, 10 ounces above the next best, and the butter yield, 4 1-2 ounces better than her nearest competitor, the Jersey, Lady Phyllis. Assuming there were four quarters to this Shorthorn udder, and each quarter had a teat attached and that none of them had forgotten its function (as some dairy specialists would make us believe all cows in this breed have), there must have been something like a gallon and a quarter from each, a quantity Mr. Thomas, will note considerably in excess of Mr. Luttrell's original description of old time red cows.

W. B. DOAK.



## THE DUAL-PURPOSE COW.

*Editor Southern Planter:*

Prof. Massey and Mr. O. A. Thomas, in the July Planter asks some questions that can readily be answered.

Prof. Massey wishes to know where are the dual-purpose calves selling at \$75 to \$100 per head. Will he kindly write to Mr. Martin, of Missouri, Mr. Henderson, of Iowa, Mr. Hawley of Ohio, Mr. Harline of Ohio, and many others if he desires them, and see if their annual sales do not average over \$100 per head. I dislike very much to publish my sales, but do so for the benefit of the gentlemen who question my veracity. I can give the addresses of five men who have recently bought calves from me at \$100 per head, and three others at \$75 per head. Prof. Massey wishes me to advise him where the dual-purpose yearling bringing \$60 as beef, can be found. On the Chicago market at \$84.76 per head. This, of course, is above the average, but it is no more than any breeder of Red Polls can do when he gives his calves proper treatment. I exhibited a calf at Richmond last year that weighed 800 pounds when 8-12 months old. The dam of the calf gave six gallons of milk per day that tested four per cent.

How about the car load of yearlings that brought \$74.80 per head, the thirtieth of June, in Chicago? Prof. Massey cites the Holsteins. Surely the learned Professor is not ignorant of the fact, it is not the conformation of the Holsteins, but the grain and flavor of the meat the butchers object to so seriously. I have seen some of the heaviest milking Holsteins grand dual types that the butchers would not touch.

Breeders of dual purpose cattle claim that certain curvatures of the head, thin graceful neck, fine or thin in shoulder with a sharp side drop back of the shoulder of the forward rib constitute fifty per cent. of the points of a dairy cow. The broader the back and the better sprung the ribs, the more favorable. A well set udder with large milk vein capacity makes the other fifty per cent. Tell me, please, what other points are absolutely necessary for the production of milk? Why should not this same cow be smoothly fleshed, when not milking, with the best quality of meat? Tell me, please, Prof. Massey and Mr. Thomas, why it is necessary for a cow to be angular in shape, narrow in loins and hips, in order to produce milk. I apprehend you will say, because it is so. That will not suffice. Thousands of men of experience and practical sense claim it is not necessary, so kindly enlighten us in the subject. We are forced to believe that neither Prof. Massey nor Mr. Thomas are posted on the records of the dual-purpose cow. It is usually the man who knows the least about these cows who condemns the most. They had rather pronounce them a myth than look into the merits of the case.

Let us see if there is any justice in their sweeping verdict:

A Red Poll steer holds the record at the Smithfield Fat Stock Show, London, over all beef breeds, dressing 73.72 per cent.

in the Carcass test at the Chicago International, in 1908, in a class of twelve pure bred beeves, the Red Poll steers Bounce and Bruno, stood third and fourth, defeating four Angus, two Galloways, one Hereford, and one

Short Horn. The Red Poll steer that stood third yielded more per hundred pounds than the Galloway or Angus that stood first or second. The judge, who was one of the best in Chicago, said he placed them so high on account of the great proportion of edible meat and so little waste fat carried. A car load of Red Poll steers topped the Chicago market in February. These steers were sons of strictly dual-purpose cows and sired by a bull that has shown some heavy milkers. A smooth cow from this same herd led twenty-six dairy cows in a three days' test at the Illinois State Fair in 1907, after shipment from Wisconsin State Fair, where she had produced two pounds of butter fat per day. Batriz, the winner of the farmers class at the Chicago International, in 1902, gave 9,475.2 pounds of milk and 439.88 pounds of butter in twelve months. Peony gave 9,659 pounds of milk in thirteen months. Her dam's record was nearly 8,000 pounds in twelve months. Dorothy averaged 9,008 pounds of milk per year for five consecutive years. Her daughters and grand-daughters are giving from 7,000 to 9,000 pounds of milk per year and are as fine quality as you ordinarily see. Out of twenty cows in my herd last year, only two gave less than five gallons per day, while in full flow, on sufficient food. Several ranged close to six gallons and two reached seven gallons per day. The great cow Gleaner gave 14,189 pounds of milk in twelve months. She was one of the twin calves that won at the fat stock shows without a single defeat. Lord Rothschilds' herd of twenty-two young cows averaged 7,744 pounds of milk in twelve months.

Mr. Wing, of the Breeders' Gazette, visited the Rothschilds herd where the milking Short Horn, Red Poll and Jersey are handled under similar conditions. The manager of the three herds told Mr. Wing, if one is so situated that he can rear the calves and make them into beef, the Red Poll and milking Shorn Horns are both more profitable than the Jersey. He advised the farmers in America, who had rolling lands, to keep the Red Poll and those in the low lands to buy the Milking Short Horn. Mr. Lamberton, of Pennsylvania, has a herd of over sixty dairy cows, consisting of Red Polls, Jerseys, Short Horns, Holsteins and Ayrshires, all selected for their milking qualities. The Red Poll cow led the entire herd in a test, with an average Babcock test of 5.05. The great cow Lula gave 12,341 pounds of milk and 605.6 pounds of butter in a year. There are five or six herds of Milking Short Horns in New York and Pennsylvania which are making great records. If \$5,000 or \$10,000 is too small amount for Mr. Thomas as specified in my last article, and nothing but a \$100,000 test will suit him. The Red Poll and Short Horn Clubs will give him satisfaction if he will give them one years' notice, so they can breed their cows to come in as near together as possible.

Mr. Thomas' imagination far exceeds facts when he claims I stated the cross between the Thorough bred and Clyde produced a race horse. I have nothing to retract in regard to the combination horse which immensely exceed the dual-purpose service, and Mr. Thomas will find on investigation, the product of this cross is far more successful and not near so "isolated" as successful race horses, from a racing standpoint.

I would like Mr. Thomas to inform us what becomes of nine-tenths of the bull calves of the strictly dairy breeds?

We now once in several years, hear of a Jersey bull bringing \$10,000 or \$12,000 from some celebrated family, but they have a good journey to the record of \$27,000. It is the average and not the exception, which counts in the long run. I would like to see published, the entire output of all the strictly dairy breeds and all the dual-purpose breeds from the farmers of our county for one year. I feel satisfied Prof. Massey and Mr. Thomas would not be heard from again on the subject. Please bear in mind while the dual-purpose cows in many cases are favorites as strictly dairy cows, we advocated them as the farmers cow where both beef and milk are appreciated.

We are satisfied with results of the past and ever open to conviction, but Prof. Massey and Mr. Thomas will have to produce arguments with facts to shake our faith in a rewarded endeavor. Any breeder of strictly dairy cattle who encourages the unlocking the harem of a dairy bull outside the confines of the dairy herd, retards progress in the production of a despised animal and that same man is a detriment to the community in which he moves. We have tried Jerseys, Holsteins and a few Ayshires, which were satisfactory from a milking standpoint, but we could not afford to give the calves all the milk they would consume for two months for \$12.

It is useless for me to ask Mr. Thomas "just what experience he has had" with the dual-purpose cow, as he proves in his article he has even read very little on the subject.

Prof. Massey is doing a noble work in building up the impoverished soils of our wasted lands, but we hope he and Mr. Thomas will pardon us for suggesting a visit to ten or twelve dual-purpose herds, which I can name for them, before they condemn an enterprise that is both practical and profitable. I then, in turn, would like to visit Mr. Thomas' farm of "research," where I can picture him with his agricultural chemist, his lawyer, his doctor, his dairyman, his shepherd, his hogman, his chicken man, his cooks, maids and five hundred other single duty helpers that are needed daily on the farm, and we would then pronounce it "unique."

We want Mr. Thomas on the farm, the many-duty man, and I do not mean to confine him to the dual-purpose-man. The dual-purpose cow is here to stay and the sooner this fact is appreciated, the better for the farmers of our country.

H. M. LUTTRELL.

Delaplane, Va.

#### THAT DUAL-PURPOSE COW AGAIN.

*Editor Southern Planter:*

I was pleased with the article from the pen of Mr. Doak, in the August Planter, because of the pleasant manner in which he presented his argument and his fairness in its discussion. Like other breeders of beef cattle, he hands out a little sarcasm, but that seems to be human nature, and I never notice things of that sort, except from a humorous standpoint. I am sure he will excuse my smile at this: "for every specialist with but one idea, the milky way, in his head there are a dozen

sensible, all-round stockmen, etc." and "the double decker, type so much discussed and ignored by the self-constituted critics." I greet you, Mr. Doak, as one such critic sending greetings to another. You can be no less a self-constituted critic than the single purpose advocate.

I wish to express my thanks for the kind invitation to see the daughters of Nominee, and hope to take advantage of the opportunity to view such good matrons.

I am not yet a breeder of pure bred dairy cattle; rather, I am a small dairyman; a student, as it were, seeking more light. Naturally I have arrived at some conclusions, and it is these that I am trying to present. In the first place I have concluded, from the tangible evidence at hand, that the special dairy cow is the only cow for the dairyman. Of course there are poor—miserably poor—individuals among the dairy breeds, just as there are good milking individuals among the beef breeds. No representative advocate of the special dairy cow claims all cows of dairy breed to be first class, nor does he take the position that the Shorthorns or any other breeds of beef cattle, may not have occasional large producers, nor that by generations of line breeding large producing Shorthorns may not be developed. In fact, it is known to all informed dairymen that in England milking Shorthorns have been greatly developed. But, if Mr. Doak, or any other beef breeder, will get pictures of those cows, they will find, almost without exception, that those cattle have been bred away from the broad, heavily muscled shanks, deep brisket, and meaty neck, to a conformation resembling that of the dairy breeds. To me it seems idle to claim that cows of large milk production can be bred from Scotch and Scotch-topped Shorthorns in any other manner than the one which has dairy conformation. Of course there are occasional large producers; but we are not looking for the occasional cow for feeding purposes. We want stock that comes from breeds where the desirable tendencies have already been established; not those where we must, ourselves, begin a system of breeding that will require a generation or two to gain the desired end.

I join in the admiration of the Shorthorns as beef producers; I was raised among the Shorthorns, and if I were to go into the business of raising beef cattle, I would find the best Scotch bull that I could afford to buy, to head my herd.

All this, however, is beside the point. If these letters are to be of any value to the readers of the Planter, something more than opinions is needed. We might place ourselves in the position of jurymen, whose duty it is to determine the facts from the evidence produced, to the end that, by comparison of results, we may be able to arrive at some conclusion as to whether the dairymen should resort to the "milky way" or the "double decker."

Mr. Doak makes this statement concerning Shorthorns: "Are they not only making more beef than any special beef breed and more milk than any dairy breed?" So far as the beef end of the question is concerned, he can fight that out with the breeders of the other beef breeds; the last six words mark the parting of the ways between the dual-purpose man and the dairyman. He closes his argument with the opinion, that the Shorthorn breed is a larger milk producer than any of the special



breeds. That is the very point of difference that has always existed between the two courses of reasoning, and instead of being a difference that can be settled by simply asking the question and expressing an opinion, it is the point upon which we want the specific evidence.

If any or all of the Southern breeders can establish that fact, not by opinions, but by authoritative evidence of production, why in the name of common sense have they not done it? That is the very thing we have been looking for, lo! these many years. Can it be possible such truth has existed and they have kept it from us, or the intelligent breeders of dairy cattle and producers of milk have failed to discover it? To say that "for every specialist with but one idea, the milky way, in his head, there are a dozen sensible, all round stockmen who value the cow, not only for her milk while she lives, but the carcass hide and calves as well that she leaves behind," is either an admission of ignorance of the aims of dairy breeders, or it shows woeful lack of information concerning what the dairy breeders are doing. I dare say the breeders of dairy cattle look quite as much to the calf as the beef or "double decker" breeders. At the Cooper sale of pure bred Jerseys this summer, one hundred and twenty-two head sold for an average price of six hundred and forty-seven dollars, and the sale was topped by a bull at twelve thousand. The bull Stockwell, formerly owned not a hundred miles from the homes of both Mr. Doak and myself, cost Mr. Lewis around eleven thousand dollars. Mr. Gillett sold Colantha Johannas Lad for about eight thousand dollars, and refused a larger sum for his mother. I could cite the names of perhaps a hundred bulls that have sold for above a thousand dollars. At the Breeders' Consignment sale at Syracuse, N. Y., last June two hundred and fifteen head of Holstein-Friesians sold for an average of three hundred and twenty dollars. One has but to enquire of the breeders of dairy cattle to learn how few individuals with breeding as royal as the Cruikshanks among the Shorthorns, can be secured at a price under one hundred dollars. I want to say in this connection that, in most cases, breeders and buyers of dairy cows are judging value by performance at the pail, and any breeder who follows the method of cow judging that was given us by the breeders of beef cattle, wherein a cow was judged by conformation alone, regardless of her ability as a milk producer, is simply following antiquated methods long since discarded by intelligent dairymen.

Coming now to the vital question of milk production, I wish to challenge Mr. Doak to prove that the Shorthorns are larger milk producers than the dairy breeds. We dairymen are in the business for the money there is in it. The cows that make the greatest profit are the cows we are looking for. I have a small herd of grades of dairy breeding, and if it can be shown that the "double deckers" can make more money for me, can be made to produce more milk than any dairy breed that I can get, I stand ready to make the change. I venture to say, however, that there is no dual-purpose breeder this side of the planet Mars, who can produce such evidence of milk production, in support of his breed, as can be produced in behalf of the dairy cattle.

Grace Fayne Second's Homestead gave 28.44 pounds of butter fat in seven days; Colantha Fourth's Johanna made 28.16 pounds of fat in one week; her year's record of milk production was over twenty-seven thousand pounds, which is approximately nine gallons a day for every day in the year; putting it in other words, she made twelve hundred pounds of butter in the year. Honor Bright gave twelve thousand, six hundred and seventy-four pounds of milk, containing 694.69 pounds of fat, in one year; Olga Fourth's Pride gave 162.75 pounds of milk, making 851.7 pounds of fat, or 1005 pounds of butter. Double Time gave 14,521 pounds of milk, containing 691.3 pounds of fat, making 806.5 pounds of butter, in one year; Jacoba Irene produced 17253 pounds of milk, the fat from which was enough to make 1112 pounds of butter, in one year. And so it goes. A list of names of cows, together with their authenticated records, could be compiled that would fill the entire Planter; the ones I have named have been selected off hand just as they came to mind. There are seventeen cows in the Jersey breed that have A. R. O. records of seven hundred pounds of butter in a year; Mr. Auten's entire herd of Jerseys gave a yearly average for three years of 367.66 pounds of fat, and this herd is headed by Jacoba Irene, named above. The last annual report of the Superintendent of Advanced Registry of the Holstein-Friesian breed, noted 2351 cows that had been admitted to the Advanced Registry during the year, covered by the report; they gave a seven days average of 395.2 pounds of milk, containing 13.68 pounds of fat; in other words, 27 quarts of milk daily and 16 pounds of butter in a week. Twenty-three hundred and fifty-one cows giving an average of six and three-fourths gallons of milk in one day, or an average of sixteen pounds of butter in one week. This is going some!

No. Mr. Doak, it is up to you.

Fauquier Co., Va.

O. A. THOMAS.

#### DAIRY INSPECTION AND THE FARMERS.

*Editor Southern Planter:*

There is a very timely, sensible and instructive article in your August number on "The Dairy Situation in Virginia," from a Mr. Albert Murphy, and your remarks on the same. If something is not done along the lines of both of your views the dairy interest of Virginia is destroyed, and the agricultural interest of Virginia very much retarded, if not considerably crippled, by the crushing of the interest that our farmers have developed in the raising of live stock for milk production, especially in dairy cows. In my county from a small beginning in two dairies, our people have begun to develop a very considerable interest in the dairy product, as the proprietors were being well paid and were improving their farms beyond their ability to do so in any other occupation. One farmer, a young man, was preparing himself to go into the business quite largely for another year, sowing large quantities of peas, or rather purchasing the peas to sow for forage, when comes along your Richmond inspector, who was a diaryman himself at one time, but was shut up because of his want of knowledge how or inability to conduct his dairy, and he stopped and shut up both dairies until these farmers

should expend several hundred dollars to make, what he called, sanitary improvements. Now I am an old man and a long-time farmer, and I have visited both dairies time and again; I never saw more cleanliness or cleaner stables. These men's wives have been noted for years for their delightful butter, bringing 35 to 40 cents per pound the year round from our best people. Now I submit will the people, through their legislature, permit Richmond, through her Board of Health, to destroy this great industry. They claim that they have through their milk sanitation, reduced the mortality of the city very considerably; I do not believe they have done so. In the first place their statistics are for far too short a period to judge from, especially when you compare all the medical reports of the State compiled from her doctor's monthly reports; I don't think any one will deny that the last two years the State has been freer of disease of all kinds than for many years. The Richmond Board of Health attributes all the claimed improvement to the milk inspection, while if there has been the improvement they claim, it has been as much from the general cleaning up of the city, or more than to the improvement of the milk. I don't believe they have improved the milk, except to make the dairymen feed the cows better and thus to have richer milk, and I doubt whether this is a sanitary measure. There is nothing more wholesome than buttermilk or even skimmed milk. No medical man will deny that the English doctors and surgeons have adopted buttermilk (or sour milk as they call it) as the best diet for all their children's hospitals or nurseries, and since this adoption, they claim that the mortality among the children has not been as great as in previous years.

Now something has to be done to protect this great interest that was just beginning to develop among our farmers. We have always had plenty of the purest milk and the best butter in the world, but we had never dreamed that the dairy business was the source from which the resuscitation of our worn-out lands was to come and thus to be restored to their former fertility by the manure the stock made and the ready cash monthly to pay the numerous bills and labor, and occasionally a fertilizer bill to help out. This interest must be fostered and protected and the farmers of Virginia must meet in Richmond during the session of the Legislature and demand that this interest shall be protected. They should take entirely out of the hands of the Board of Health the appointment of milk inspectors, even in their own cities, and the work be left in the care of the State Dairy Commissioner. If the milk from any dairy is objected to the appointees should have no authority to stop any dairyman from delivering milk until the State Commissioner directs or shall examine the complaint and his decision shall be final in the matter, and no Board of Health shall interfere in the matter or prevent the delivery of the milk to the accustomed place of delivery. The milk shall in no sense be condemned by those who have contracted for it, until the milk inspector of the State condemns the dairy and he shall then issue orders to correct the complaint, suspending delivery until such improvement is made to the satisfaction of said State Inspector.

**FARMER WHO WILL BE HEARD FROM WHEN LEGISLATURE MEETS.** Powhatan county, Va.

## ANGORA GOATS.

*Editor Southern Planter:*

I notice the advice "Farmer" gives to Southern Planter readers in the August issue regarding Angora goats. He says "go slow." Good advice and will apply to any and all new ventures on the farm. However, if you have a field well fenced and a part, or all of it growing sassafras, brambles, &c., a good crop of weeds and any or all those things that make our Southland so unsightly, don't go to slow in placing a flock of high-grade Angoras on it. Some tell us sheep will do all this work of cleaning up. I keep both sheep and Angoras and sheep will not clean up waste land willingly; goats will and gladly. When a flock of Angoras go after all this trash and get the job done; it is done permanently and well done. No grubbing to be done again next year, but ready to plow and cultivate in comfort. If I had a farm that needed cleaning of brambles, sassafras, cockle burrs, or any other nuisance that grows, no one would keep a flock of Angoras off. If I were growing roses, grass vegetables and had a clean farm, then I would not keep Angoras. And while we were going slow, as "Farmer" advises us to on this stock, they would be working for the man who owned them fixing his farm so that he could some day, "if he wished," go faster.

W. W. STOCKWELL.

South Boston, Va.



First Prize Shropshire Ram, Royal Show, England, 19.9, Imported by Henry L. Wardwell, Springfield Center, N. Y., and now at Stud in His Flock.

## VIRGINIA PACKERS' ASSOCIATION.

*Editor Southern Planter:*

This Association has made a most gratifying record during its operations last year. Those interested in better packing of apples who live in the Piedmont section, in which this Association operates, can obtain information from any of the following officers. President, Dr. John R. Guerrant, Calloway, Franklin Co., Va.; Manager, Mr. T. W. Woollen, Crozet, Albemarle Co., Va.; Secretary and Treasurer, Mr. R. E. Wayland, Crozet, Albemarle Co., Va.



## The Poultry Yard.

### POULTRY NOTES.

*Editor Southern Planter:*

This morning, August 18, fresh eggs are selling for 30 cents per dozen in the market. This is an indication that eggs are not plentiful. This means that poultrymen have cut down their flocks and have economized on feed to the extent of very materially reducing the egg yield. I have been in the business forty years, and have never seen such a demand for good pullets as there is at this time. I have not advertised a single line to sell, yet I have sold every bird that I have to spare, and have returned many orders. I intend to keep but one breed and a few birds of two other breeds, simply as a matter of pleasure. This season is my first experience on a small place, in a densely populated community, and I find that my advice and prediction to many of my customers and readers is true in every respect. I have always said that the farm is the place to raise poultry for profit for many reasons, yet many people think that they must get near to a city or car line to succeed with poultry. It certainly is a great convenience, but I have paid for all the convenience and more. The increased cost in care and feed is considerable, and the risk of having eggs and stock stolen is very much greater near a city than in the country. I have had many eggs stolen this season and have recently had over fifty of my largest pullets stolen in one night. When I am at home, I sleep with one eye and both ears open, but since we live on the car line, the temptation to go to entertainments has overcome my judgment several times, and the first time I went away at night the pullets took unto themselves legs and walked away. The thief evidently knew the coast was clear and he cut the wire front and went in and selected what he wanted and departed. The only way that I see out of the difficulty is to put steel bars on the open front instead of the wire screen, and that looks bad, and I fear that the hens will regard it as a reflection on their character and may strike. A friend advised me to get a good bull dog, one that had a well developed taste for tough steak. He said that he had one of this kind that never slept. Some days later he was looking through the market, here to find some of his hens that had been taken the night before. I inquired about the health of his dog, thinking that he must have had a sudden attack of indigestion. He said d—— rat the dog. I have never known him to be away before, but he was away that night or else they hymn-otized him.

This month and next will determine to a great extent, the egg yield for the coming winter. We must feed and feed liberally, both old and young, in order to get the hens and pullets to laying. If we can get them through the moult and fully fledged and laying by November, we can keep them at it all winter. Pullets that are fully matured will lay a good lot of eggs before the eggs are wanted for hatching, and should not have the males with them until a week or two before the eggs are wanted for hatching. I am thinking now that I will select about 50 of my best hens and pullets and keep them on short

rations until about October, and then give them full ration and get them into good laying condition by mid-winter, for eggs to fill my incubators. Some good breeders and fanciers think that the eggs will hatch stronger chicks, but I think that if the hens are in good condition and health, that the lack of vigor is altogether the fault of the males. I intend to begin hatching about Christmas time and want good eggs and enough of them to fill a good sized machine every week. I expect to have a brooder house ready for them, so that I can give them a warm place to grow and get large enough for broilers in seven to eight weeks.

I am experimenting with a small flock of Andalusians. I bought the best eggs that I could get and have some very promising ones, but they do not breed true to feather. I have some that are black as crows and some that are white with blue legs and faces. It is a guess what they will look like when they put their permanent coats on.

I have several letters from readers, asking how to make hens moult. I have written about this fully in former notes, and will simply say that I know of no way that one can feed to make them shed their feathers. All that I know to do is to feed all that the hens will eat of rather fattening feeds, such as corn, wheat, oats and some oil-cake. Some advise hemp seed and sun flower seed, and some say starve the hens. I have tried about everything in this line and am of the opinion that good feeding is all that is necessary. HUSSELMAN.

A long molting season with few or no eggs for many consecutive weeks clips off the profits for the year on a flock of fowls in a way that would be surprising to many of the fairly well-satisfied owners who never know exactly whether their poultry is bringing in a little more money than it costs, or costing a little more money than it brings in. A good molt with a quick recovery to high laying condition is one of the definite aims to be realized if we are to count upon fully satisfactory returns for the year's work. Whatever special care is needed to promote this end is certainly of high immediate value.

Various methods have been suggested by poultry fanciers in regard to special feeding and also withholding food to hasten the process of molting, but there seems to be no sufficient evidence of their reliability under actual ordinary conditions. Common sense tells us that the demand for food is increased while fowls are growing new feathers, and it is safe to say that a liberal and varied diet at all times can be trusted to promote health and full productiveness. Good feeding unquestionably requires variety no less than a liberal allowance in quantity. Where a free range can be given, even for a part of the time, the abundance of insect life at this time of year enables the hens to forage for themselves with interest, and thus gain a valuable element in the diet. A flock confined for most of the time to a rather small yard is greatly helped by being allowed a run, for an hour even, before the usual time for going to roost.—Country Gentleman.

## The Horse.

NOTES (By W. J. Carter).

### "Broad Rock."

The outlook for the fourth annual Virginia State Fair to come off at Richmond during the week of October 4-9, seems brighter than during any previous year in the history of this large and important affair, now widely known and recognized as one of the most important institutions of the sort in the Middle and Atlantic States. With increased purses and premiums and new classes added to the prize list, the enthusiasm of the masses, who seem more deeply interested than was even hoped for, especially in the rural districts, is highly gratifying to the management. Young and active in the cause, the assistant secretary and general manager, Mark R. Lloyd, who has been connected with the State Fair since its organization, has brought to bear practical experience in the direction of affairs and the added attractions furnished by the creative genius of a fertile brain promise diversion of a rare sort to the big crowds always in evidence at Richmond during State Fair week. Exhibits of live stock promise the most varied and highest class collection, including the show horse department, while racing will furnish sport of the sort to enthrall tens of thousands gathering at the ring side, as both harness horses and runners of note will compete for the purses offered for trotters, pacers, steeple-chasers and performers on the flat. The speed programme, as prepared under the supervision of the race committee, made up of J. T. Anderson, Legh R. Page and W. J. Carter, is one of the pleasing features of Virginia's big fair, but there are many others as well, all of which are offered with an earnest desire on the part of the management to entertain and instruct patrons and supporters of an organization capable of accomplishing a vast deal of good in general.

Dr. Fred C. Kellam, of the Kellam Cancer Hospital, has sold to Southern parties the handsome road mare, Fern Kellam, by Bursare, 2:29 1-4, dam of Belle C, 2:32, by Clay, son of Walker Morrill the sire of Lamp Girl, 2:09, holder of the record for Virginia bred trotters. Dr. Kellam is a member of the well known family bearing his name, on the Eastern Shore of Virginia, by whom a number of good horses have been bred, and is himself a loyal friend of the light harness horse, but increasing demands upon his time in a professional way, affords slight opportunity for indulgence, even in the favorite pastime of road driving. The Kellam Hospital, which is one of Richmond's flourishing institutions, is to be enlarged soon, which will afford increased accommodations for those with means and others subjects of charity to be treated alike.

Bell C, 2:16 1-2, one of the stoutest hearted trotters and gamest campaigners yet bred in Virginia, was owned by the late Lucius J. Kellam, a younger brother of Dr. Kellam.

Dr. Nash P. Snead, who formerly bred horses at Montrose Farm, Cartersville, Va., is now probably the largest

importer and breeder of Shetland ponies in the State. The Montrose Farm pony breeding establishment is a creation of recent years, but the reputation established by Dr. Snead is of the sort that endures rigid tests and as a consequence sales have been frequent to parties in various sections of the Union. An importation from the islands of over fifty head was made last fall, including the stallion Steinvorrod and a rare lot of brood mares, with some choice young things, too. The pedigrees and records at Montrose Farm are kept by Mrs. Snead, who possesses a remarkable fund of information on the subject. Dr. Snead's little daughter, Martha, aged seven years, breaks most of the younger ponies and daily association of these midgets of the horse world with small children seems to render the Shetland docile, kind and tractable to a wonderful degree truly. The offerings at Montrose Farm include fine stallions and choice brood mares, both island and home bred, and some well-mannered, beautiful little geldings for the use of children.

One of the pleasant features of our forthcoming Virginia State Fair, at Richmond, during the week of October 4-9, will be the exhibit of Island and home bred Shetlands, by Dr. Snead, including imported Steinvorrod, the premeer sire at Montrose, and a choice band of brood mare, with a lot of younger ponies.

At his country home on the Hermitage road, right near the State Fair grounds, R. B. Henley has his stable of trotters, and the horses are being handled by James W. More. Mr. Henley hails from North Carolina, but migrated to Montana a number of years back, with headquarters at Dillon, and then removed to Virginia. In the training barn, young More has six head of Montana bred trotters, and in his careful hands they are doing nicely. Mr. Henley is now in California, looking after a farming interest on the Pacific Coast, but in his absence, More looks after affairs at the Virginia breeding establishment, where a lot of well-bred stallions, brood mares and young things are kept. Mores' stable includes Brutus Henley, brown horse, 5, by Rodemont, 35632, dam Padova, by Tempest; Jim Henley, black horse, 5, by Rodemont, dam Lady Sandlewood, by Izel; Byron Henley, brown horse, 5, by Jim Hamilton, son of McKinney, 1:11 1/4, dam Ryme, by Copper King, son of Wilkes Boy, 2:24 1/4; Addison Henley, brown horse, 5, by Rodemont, dam Lucy, by Commodore Belmont; Max Henley, brown horse, 5, by Copper King, dam Poetry, by Tempest. In addition to these, there are other Montana brood horses in More's string, with some clever young things bred in Virginia.

Muda Guy, the bay filly, three years old, by Guy Axworthy, 2:08 3/4, who trotted to a record of 2:22 1/4, at Philadelphia in a winning race last month, was purchased by her present owner, A. B. Coxe of Paoli, Pa., during the past winter from Floyd Brothers, Bridgetown, Va. She was bred by John H. Shults and passed to the Messrs. Floyd, who obtained her as a yearling at one of



the Madison Square Garden sales. Muda Guy figures among the richest bred fillies in the country, seeing that she is by one of Axworthy's best sons, from Muda S., by Stamboul. 2.07½, and she out of Nancy Lee, the dam of Nancy Hanks, 2:04. Such rare blood lines as these prompted the purchase of Muda Guy by Floyd Brothers, who intended developing the daughter of Guy Axworthy and then mating her with Sidney Prince, the Floyd Farm stallion, who is siring speed with uniformity, on the Eastern Shore of Virginia, where about everything from his loins and from all classes of mares, too, is showing speed, this being strongly suggestive of the dead Sidney, his sire, who made history in the long ago on the Pacific Coast. Quite recently Muda Guy worked a mile at Belmont Park, Philadelphia, in 2:12, with the last half in 1:05½. She is entered in several of the rich stakes for three-year-old trotters, and is being prepared for her engagements.

#### WHY IS IT THAT WE DO NOT SEE MORE MORGAN HORSES IN VIRGINIA?

"The Government's Interest in the Morgan Horse."

In 1906 the government started in Vermont, a stock farm of nine mares and two fillies, for the upbuilding of the "Famous" old Morgan blood. A little later, they established in Colorado another "Morgan" station, to work in co-operation with the one already doing good work in Vermont. The object is to prevent the loss of this blood, preserve the type and increase the size. The work has lately been greatly extended and so much interest is being aroused in Vermont—the home of these grand horses—that one citizen has given a farm of 400 acres to be used in these operations. The Morgan's are the general all-purpose horse of today, and wherever you see a "blooded" Morgan, you may count on his being a noble animal. They are in nearly every instance, nicely proportioned, extremely quiet to handle, easy to break, remember well your teachings, whether good or bad, and are the least excitable of any horse the writer has ever seen. They have a wonderful amount of endurance, are very hearty easy to keep, almost all are good travellers, weigh from 1,000 to 1,300; mostly bays, and nearly always show white on legs or star in face. The horses can be raised in any State or county in the South, and are far above the ordinary animal for general use. Why is it that we do not see more of them? If there is ever one brought into your community, it will convince you of their worth.

W. M. N.

Powhatan, Va.

#### IMPROVING FARM HORSE STOCK.

(Strange, isn't it, how the fearful ones a few years ago predicted that the horse business was on the road to the bow-bows! One publisher even had the courage to start a magazine called the Horseless Age. But it is anything but this. Never was horse flesh of the better class in higher estimation than today, with good prices secured for first-class breeding stock, roadsters and draft animals. The hints on improving the stock on the farm here presented by Harry E. Allen, of New York, is there fore, most timely).

Draft horses are in great demand. Buyers are scouring the producing sections with energy, and most of them complain, not at the high prices demanded, but at the absolute scarcity of good individuals. Try to buy a pair of good ones; you will be most forcibly convinced that we have not nearly enough of the kind we want. On the contrary, however, the country is filled with ordinary, undersized plugs with no indication of selection or of breeding.

There is one way of improvement which may at first seem unfair in some respects, but in the end works for the betterment of all concerned. It is the enactment and enforcement of a stallion law. During the past four years five States have put into operation laws made to ensure that stallion owners properly represent the breeding of their horses standing for public service. The general plan of these laws, now doing good service in Wisconsin, Minnesota and Pennsylvania, calls for every stallion owner to secure a State license, copies of which must be used in every form of advertisement for the horse, and must be posted in every stable in which the horse is kept during the breeding season. This license, issued by the official entrusted with the enforcement of the law, must show the actual breeding of the horse, whether pure-bred or grade, and if pure-bred, by what record association registered. Licenses are refused to horses found to possess any of certain enumerated unsoundnesses believed to be hereditary.

The chief value of a stallion law lies in the opportunity to acquaint the mare owners with the facts regarding the stallions of their vicinity and to arouse an interest and inquiry that will procure proper recognition and appreciation for superior horses and discourages the patronage of low grade animals whose progeny fill no market class and exhibit no uniformity. It is not the idea of the law to dictate or suggest what kind of horse any farmer or community should patronize; the object is to destroy the business of inferior sires.

But what about the mares? Since every farmer has use for the work horse, why not have good mares to do this work? Mares which, besides doing the same work better than a scrub, and on just as little cost of keeping, will produce a good colt, once a year. These colts will pay well for the investment and trouble. Considering the strong demand for horses at good prices, the ease of raising them and their many other advantages, it seems plain that the good horse is the horse for the farmer, and that he should not only breed enough to keep himself supplied with teams, but should have one or more to sell every year.

But, you say, this or that fellow failed at just this sort of thing. Quite likely. And why? Perhaps he bred his mares to some grade mondescript or maybe to a slabsided and crooked legged horse that happened to be a pure-bred. Were there no good, sound, well-bred stallions in the neighborhood? Yes, but they stood at \$20, while these others only charged \$8 or \$10. So these mares were bred to the mongrel stallion to save possibly \$10, while the produce of such a mating would, in all probability, be worth from \$40 to \$100 less than if the mares had been bred to good horses.

Or maybe the fault was not in breeding, but in feed-

ing. It takes plenty of good feed to make large draft horses, and any check or stunting in their growth will take quite a few dollars out of the breeders' pocket. So breed right, feed right, and you are sure to get the desired product. The whole thing in the end amounts to the improvement of the stallion; in keeping good, large, vigorous mares for both farm work and breeding; and in the well feeding of the growing colt. This last is a side often neglected by the average farmer who seems to think that after weaning time the colt can shift for himself; and hence many promising colts have made very ordinary horses, due to stunting and lack of proper feed and shelter while growing.—American Agriculturist.

We strongly endorse the commendation by Mr. Allen of a stallion law, and trust that our subscribers will impress upon their representatives in the coming legislature, the importance of the enactment of such a law for this State. The President of the State Farmers' Institute, Mr. Westmoreland Davis, in his annual address at the recent Charlottesville meeting, emphasized this as one of the necessities for securing a better type of horses for the State, and his remarks received the cordial endorsement of the farmers present, a large and representative body from every section of the State. Get after your representative at once on this subject. We want to get rid of the "plug stallions" as soon as possible. Whatever kind of sire you breed to, let him be the best of his type, and above all things, sound in "wind, limb and eyesight."—Ed.

#### THE SUFFOLK PUNCH IN VIRGINIA—AN IMPORTED SIRE.

*Editor Southern Planter:*

A very noted Suffolk Punch stallion, Sudbourne Don 3247, has been imported to Virginia from Suffolk, England, by Mr. H. C. Groome, of "Airlie," Warrenton, Virginia, a picture of which we are pleased to present.

It has been the pleasure of the writer to examine a number of pictures representing every possible view of this horse, judging from which he is one of the best of the breed. I regret that it has been impossible for me to accept the kind of invitation of Mr. Groome to personally look the horse over. As this is doubtless the first importation of a Suffolk to the State, and as the Southern Planter has done much to call the attention of farmers to this great agricultural breed of horses, it seems but proper that the first presentation of this splendid horse to the farmers of Virginia should appear through your valuable journal. As with other breeds, doubtless poor specimens of the true type of the Suffolk will be brought into the State; therefore, to avoid misjudgment as to the breed, any true pictures that can be presented will be of advantage in establishing the idea of the true type in the minds of those interested. There are few horses but that could be improved in some way, but Sudbourne Don is peculiarly satisfactory as a type of the breed. The fact that he is a good Suffolk, whether or not he may be regarded as the ideal heavy draft horse, is established by his having been a prize winner in the Suffolk Horse Shows the past year; also, in the Shows of Essex

County England, 1907, and Reserved Championship in the Norfolk, England, show last year.

This horse was imported by Mr. Groome in March of this year. He is not for sale and already has his book full. He will be shown at the State Fair, where we trust farmers will avail themselves of the opportunity of looking at a good Suffolk, remembering that no less a horse expert and writer than J. H. Sanders, of the Breeders' Gazette, now deceased, said of the Suffolk: "This is perhaps the best established of all of the so-called agricultural breeds of Great Britain."

Some deny that the Suffolk carries Oriental blood or that he has any crosses of Percheron, or French, blood, believing that it is to the detriment of the breed to ac-



SUDBOURNE DON.

knowledge this, yet it is conceded that the draft characteristics of all the heavy breeds of horses are due to the "large black horse breed of Flanders." It seems to me no less creditable, on account of the endurance and speed, to acknowledge the Oriental blood. The Norman, Percheron, or French draft horse has as its prevailing color, for many generations, the gray. It is well known that the cross between a gray horse and a bay mare nearly invariably produces a sorrel, doubtless explained only by some of the features of the Mendelian law, which accounts for the unexpected colors in poultry breeding and elsewhere. It is also known that a few centuries ago the mares of Suffolk and Devonshire were bay. All the draft breeds of France acknowledge their heavy characteristics as coming from the "black horse of Flanders." Sanders says that tradition has long attributed to the Percheron an Oriental origin and that researches made in the compilation of the pedigrees for the first volume of the Percheron Stud Book of France show that the blood of the Orient was used to a large extent, and adds: "What the Darley Arabian was to the English Thoroughbred and the Gray Arabian, Smetanxa to the Orloff, the Gray Arabian, Gallipoli, appears to have been to the Percheron of France." Professor Curtis, in his history of the horse, says: "The origin of the Suffolk breed is somewhat obscure, but the best evidence obtainable indicates the use of Norman (French Percheron) stallions on the best native Suffolk mares. That this is true is strongly evidenced by the Suffolk color—sorrel or chest-



nut—which has so often been found a compromise color between bay and gray; the former being represented in the native mares, the latter being the predominating color of the Norman stock."

The Percheron, or Norman, as they were called a few years ago, is noted for his quick action, due, doubtless, to the blood of the Arab horse. None need imagine that they can accomplish the establishment of a similar breed of horses just as good as the Suffolk, for those who have studied carefully the principles of breeding must know that we cannot, in a few years, or even decades, of one short life, accomplish what the Suffolk people have done in three or four centuries, possibly longer as the fixed characteristics of the Suffolk mares are known to have existed at least six centuries. The continuous breeding in line has given them a prepotency which assures not only the conformation we desire, but also fixedness of color not known to exist in any other breed of horses.

Sudbourne Don, 3247, recorded in the stud book of the Suffolk Horse Society of England, was foaled in 1904, and is not only a winner himself, but was by the champion, Sudbourne Count, 3257, dam, Sudbourne Dorothy, 5445.

While this breed of heavy horses may not produce as heavy weight as is desired on the streets of the great cities, yet the demand for the right kind of horse for that great mass of people—the farmers—who will always use horse power, makes it desirable to breed the best horse possible for agricultural purposes, and this we believe the Suffolk Punch to be. WALTER J. QUICK.

Since we received the foregoing from Dr. Quick, Mr. Groome, the owner of the horse, has sent us the following particulars of his breeding, etc., which we are glad to publish. We are pleased to know that the horse will be exhibited at the State Fair and hope that an inspection of him may convince our readers that we were not in error when we advised the Punch as the best farmer's horse in the world. We appreciate the compliment Mr. Groome pays us by exhibiting him.—Ed.

#### *Editor Southern Planter:*

Suffolk stallion, "Sudbourne Don" No. 3275 Stud Book Suffolk Horse Society, No. 352 Stud Book American Suffolk Horse Association), foaled 1909. Sire, Champion "Sudbourne Count," 3257; dam, "Sudbourne Dorothy," 5445, by Cook's "Milo," 2042, out of "Dorothy," 2483, by Garrett's "Cup Bearer 3d, 566. "Sudbourne Count" 3257, by Sir Cuthbert Quilter's "Prince Wedgewood," 2364, out of "Sudbourne Cuss," 5387.

"Sudbourne Don" was bred by A. H. E. Wood, late of Sudbourne Hall, purchased from Kenneth M. Clark, Sudbourne Hall, Oxford, Suffolk, by H. C. Groome, Warrenton, Virginia, and imported March, 1909. "Sudbourne Don" was shown in England four times, as follows: Second at Essex County Show, 1907; reserve at Norfolk County Show, 1908; second at Suffolk County Show, 1908, and second at Woodbridge Show, 1908, in two latter shows being beaten by Sir Cuthbert Quilter's champion, "Bawdsey Harvester," 3076.

"Sudbourne Don" is a chestnut horse with silver mane and tail, stands 16hands, 3 inches; measurement below

knee, 10 1-2 inches; girth, 87 inches; weight, 1850 pounds.

I expect to send this horse to Richmond, and I may confess it is largely on your account that I do so, as after your strong advocacy of this breed, I think it is only fair to give you an opportunity to point out as a result of your labor at least one individual imported direct from England that has had the stamp of approval by the English judges at their local shows.

Hoping to have the pleasure of meeting you during the Richmond Fair, I am. H. C. GROOME.

#### THE NOMINATION OF THE COMMISSIONER OF AGRICULTURE.

Although the primary for the nomination of candidates for the Commissioner of Agriculture and other State officers was held on the 5th of August, yet up to the time of this writing (24th of August), no decision has been announced as to who was nominated as Commissioner of Agriculture. The last unofficial figures given out showed a small majority for Mr. Koiner, but the circumstances attending the finding and forwarding of these figures were of such a suspicious character that no one seems to place any reliance upon them and least of all do we. From information gathered from all over the State, we believe firmly that Mr. Brown received a majority of the votes cast, and this appears to be the opinion of most people. So long as the figures giving the votes for all the candidates come regularly along during the first four or five days after the election Mr. Brown had a long lead. At the end of that time he had a majority of about 3,000 votes. Then suddenly the figures for the Commissioner-ship ceased to come in, whilst those of the other candidates were given out and practically the question of who was nominated for the other offices was settled by returns being received from all the counties. Then the figures for Commissioner began to dribble in slowly a few each day for nearly a week longer and curiously all these were in Mr. Koiner's favor, although coming from widely different sections of the State and in many cases where in adjoining counties Mr. Brown had had majorities accorded to him in earlier returns. In some counties majorities reported for him were changed to majorities for Mr. Koiner and he was not given as many votes as he had previously been given majorities. All this seems mighty mysterious and suspicious to those who are cognizant of the wily political ways of Mr. Koiner. Why were not all the figures sent in together from each county? They could have been and should have been. It would look as though the word was passed to withhold the returns until it was seen how much Mr. Brown was ahead and then it would be seen how much manipulation of the figures would be required to overcome this majority and later the figures came along which accomplished this.

There is widespread dissatisfaction as to the way in which this election has been conducted, and this is not confined to Mr. Brown's friends alone. We have discussed the matter with strong supporters of Mr. Koiner and they are equally disgusted and several of them have told us that if the official declaration gives the nomination to Mr. Koiner they will not vote for him.



## Miscellaneous.



The Institute on the portico of Cabell Hall.

### THE VIRGINIA STATE FARMERS' INSTITUTE.

The 6th Annual Session of the Virginia State Farmers' Institute was held in Cabell Hall, University of Va., Aug. 10th, 11th and 12th, as advertised.

The extended program was very greatly enjoyed by several hundred members, representing practically every county in the State.

President Westmoreland Davis presided throughout the session with great satisfaction to the entire assembly.

It is, of course, impossible for us to give even a brief resume of the program as pretty nearly every phase of agricultural life was covered by competent speakers and the members who missed this session will have to content themselves until the proceedings are published in book form.

On the last day of the institute, the Chamber of Commerce of Charlottesville, gave the entire Institute quite a delightful Tallyho party to Monticello, the home of Thomas Jefferson, now owned by Hon. J. M. Levy. This outing was greatly enjoyed as it afforded numerous members their first opportunity of seeing this historic spot.

The business session of the Institute was held on the morning of the last day the following directors were elected for the year of 1910: Dr. C. U. Gravatt, Port Royal; Jas. Bellwood, Manchester; J. L. Carter, Chat-ham; Leslie D. Kline, Vacluse; Westmoreland Davis, Leesburg; Henry W. Wood, Richmond; T. O. Sandy, Burkeville; Jos. A. Turner, Hollins; Maj. A. J. Tynes, Tazewell; J. F. Jackson, Richmond.

This Board will meet at its convenience and elect a president and secretary for next year.

Quite a number of farmers' problems were discussed both by the Advisory Council and by the open Institute and indications are that the directors will have their hands full during the approaching winter.

It was unanimously decided to hold a winter session of the Institute in Richmond each year, and to keep the summer session migratory as at present.

All farmers of the State are cordially invited to become members of the Institute and all old members are urged to remit their dues to the Secretary, B. Morgan Shepherd, Box 840, Richmond, Va.

The fee is only \$1 per year and entitles all members to a copy of the printed proceedings, as well as all privileges of the Institute.

It is the intention of the Board of Directors of the Institute to keep a close watch upon all matters which may be brought before the Virginia Legislature, affecting the agricultural interests of the State, and it is desired that members shall bring to the attention of the Board, any subjects which they think ought to have consideration by that body, affecting any of the agricultural institutions of the State or for the advancement of the interests of the farming community.

### WHAT VIRGINIA NEEDS TO IMPROVE HER AGRICULTURAL CONDITIONS.

*Editor Southern Planter:*

There is much said, and very truthfully, too, relative to the natural resources of the great State of Virginia as an agricultural State. That she is able to make good all that is claimed for her is true, and more. Very few people, very few farmers, know the possibilities of an acre of land. To talk about agriculture in a general way is better than not to talk, but, to get ideas, conditions and possibilities squarely before the farmers of America, we must be specific. To say that Virginia is a great agricultural State is not true, but when we say that Virginia can be made one of the greatest agricultural States in



the Union we are entirely within the bounds of possibilities. . .

It has been my good fortune to be allowed to talk to the Southern people through *The Planter* for five years or more on one branch of the live stock industry of the South and incidentally I have touched other matters of vital importance to the improvement of general agriculture. If the Editor will give me space, I will undertake to point out in this, and future communications, some specific reasons why Virginia is not gaining in rural population and wealth as rapidly as the West and Northwest. The question of "rich, virgin soil," is no longer tenable. The State of Virginia, with an area of 27,163,000 acres, contains to-day more virgin soil than does Indiana with an area of 23,264,000 acres, or than Iowa with 35,856,000 acres. Virginia has more timber, more coal, more iron, more limestone, more building stone, more mineral wealth, including gold, greater water power, than both Iowa and Indiana combined. Virginia has approximately two thousand miles of tidewater shore that not only gives her the cheapest possible transportation to domestic and foreign markets, but also yields a great revenue to the State in oysters, fish and other sea products. Railway facilities are ample and capital abundant for every need.

Soil and climate, sunshine and rain are as genial, abundant and equable as anywhere on the face of the globe. Virginia can and does produce everything that Iowa and Indiana can produce and many crops that cannot be produced in these two great agricultural States. If all this is true, then why is the Virginia land so low in price as compared to the value of agricultural lands in the two States named? I take these two States for comparison because they are regarded as two of the greatest producing States in the Union and because I have travelled over every county comprised in their great area and mingled with the agricultural classes in social and business relations for many years.

As noted above, I will aim to point out some of the reasons why values are low and why immigration to Virginia is not more general. It will not answer to say that Virginia and her advantages have not been proclaimed or advertised. Ever since the beginning of American history Virginia has been known to the world. Her statesmen, her orators, her soldiers, her sailors, her noble, comely and brave women have been the theme and admiration of civilized man in every quarter of the globe.

I will say, first, that the oft-repeated and deep-seated slogan, "Virginia for Virginians," has created a prejudice at home and abroad against Virginia. Let this slogan be changed to "Virginia for any and all good Americans."

I want to say plainly in this connection that I believe the time has come when we, as a nation, need and should husband our resources for our posterity. We should no longer encourage the immigration of the old world's surplus population to our shores, but let America be for Americans and let each and every State be a unit unto herself in her right as a State, but accord equal rights and liberties—social and political, commercial and civic—to the immigrant from any other State. Let us be truly a Democratic people. I cannot agree with the statement so often published that the South has no feeling or preju-

dice against the North. I have been a resident of Virginia for six years, and know that this feeling does exist. Let us be honest and truthful. There is little or none of this prejudice shown or manifested in the towns and cities, but in the rural districts, among the agricultural classes, there is a well defined and deep feeling of bitterness for the Northern man. This may be said truthfully of a few men in the North. There are a few of these "long haters" in the North alive to-day, but, fortunately, the limit of three score and ten is nearly run. I personally know many Northern men, now residents of Virginia, who came here with families, with money, with energy, skill and industry, to make a home, and all that the word can express or imply, who see and know and feel and realize that they are not accorded that hospitality and friendliness, confidence and respect, due to them as citizens of a great Commonwealth. I know of many good men who have gone back to their native States because of this feeling..

The schools and school system are a great hinderance or drawback to rural immigration. This is improving rapidly, but we will not have good schools until the private family school is abandoned and all the children of school age compelled to attend the public schools. We have too much threadbare aristocracy, too much "I am holier than thou" feeling among the pupils and parents in our rural communities for the advancement of the public schools. The State should compel the attendance at public schools of every white child of school age, and should furnish books free. We always have men and boys enough in the penitentiary to print and bind all the books necessary for every child in the State. Let the convicts make roads to the school houses and books to put into them instead of shoes for the trust!

CAL HUSSELMAN.

#### GROUND LIMESTONE FOR THE FARMERS.

*Editor Southern Planter:*

The Southern Planter is not a political paper, but, as the representative of the agricultural interests of the State of Virginia, it owes to our farmers certain duties, including propaganda for legislative action deemed necessary for the welfare of our farmers.

The State of Illinois sells to her farmers ground limestone at 75 cents per ton, loaded on cars. The greater part of the soil in the State of Virginia is in need of liming. We know that burnt lime is destructive to humus. We know that we should not destroy the scant supply of humus in our soil. Limestone can be found in our State at a reasonable price.

Our farmers, as a class, are poorer than the farmers of Illinois. Our soil is also poorer, yet we must compete with the soil and the men of that State. We cannot afford to pay more for lime than our competitors do, and there is no reason why we should.

The way to get a thing is to go after it. Let every farmer in Virginia submit to the members and to the candidates for the Assembly and Senate from his District the following question:

"How do you stand on the proposition that the Commonwealth of Virginia should construct and maintain plants for crushing and grinding limestone or shells at convenient points on the principal railroads, preferably

where water power or other cheap power may be had, such plants to be operated by State or county prisoners, making suitable arrangements with the county authorities for cooperation. And that the ground limestone be offered for sale to farmers of the State of Virginia at a price of 75 cents per ton, loaded on cars, this being the price at which ground limestone is sold to the farmers in Illinois by the penal institutions of that State."

Don't merely ask, insist upon it that this question be submitted to the Legislature and be voted upon. And ask that the Southern Planter publish from time to time what your representatives have done in this matter and how they have voted. You are entitled to know who is working and voting for or against your interest. Lime is the most essential thing needed to improve our lands so that they will grow clovers and alfalfa, and, after that, more wheat and more corn. N.

We have for sometime past been in correspondence with the State authorities of Illinois endeavoring to secure the information as to this ground limestone business and are glad to say that we have now gotten all the facts, and propose to embody them in a communication which it is our intention to submit to the Governor of the State with a request that he bring the subject to the attention of the Legislature with the purpose of securing the enactment of like laws to those of Illinois for providing our farmers with the much needed ground lime from our inexhaustible limestone rocks and oyster shells. Prof. Cyril Hopkins, the Professor of Agronomy and Chemistry of the Agricultural Experiment Station of Illinois, through whose excellent work the importance of this limestone supply to Illinois farmers has been demonstrated, and who has been largely instrumental in bringing about the necessary legislation to make it available, writes us: "You will be interested to know that the railroads of Illinois have united to make a uniform freight rate of one-half cent per ton per mile on ground limestone for soil improvement, with a minimum charge by each of twenty-five cents per ton. The Penitentiary is able to furnish the stone in bulk ground to all pass through a screen with sixteen meshes to the inch, loaded on the cars, for sixty cents per ton." We ought to be able to do as well here for our farmers as they in Illinois, and we intend to do our best to bring this about, and shall look to our subscribers and readers to help us by bringing their influence to bear upon their representatives in the Legislature.—Ed.

#### THE VIRGINIA STATE FAIR—RICHMOND, OCTOBER 4TH-9TH, 1909.

As the time approaches for the close, on September 14th, of the entries for the fourth annual exhibition of the Virginia State Fair, to be held the first week in October, a forecast of this great exposition of the Old Dominion's resources and best products is timely. Ever since the inception of this worthy enterprise, four years ago, the ambition of the public spirited men who have been promoting it has been to make each succeeding exhibition an improvement upon its predecessor until there should be provided for the farmers of Virginia an institution equal to any of its kind in the country and whose benefits shall be manifold and lasting. That their efforts thus far have not been in vain is readily evidenced

by the successes of past exhibitions and the prospects of the one to be held next month.

Never before in Virginia, nor, indeed, in the entire South, have preparations for a Fair been made on so large and grand a scale and the only remaining factor to be considered in ensuring a complete success is the weather. The premiums and purses in all departments show a decided increase over last year, the totals aggregating \$40,000, and provision has been made for nearly everything known to agriculture, horticulture, horse-breeding, stock and poultry raising. The premium list is already in the hands of a majority of the farmers throughout the State and a thorough resume of the same is contained in an advertisement found elsewhere in this issue, to which the attention of the reader is called.

A canvas made by General-Manager Mark R. Lloyd, of those in attendance at the Virginia State Farmers' Institute, held at Charlottesville during the past month, disclosed the fact that many farmers had already prepared to make exhibits at the Fair and that a healthy rivalry was in progress. One of the sessions of the Institute was addressed by the President of the Fair Association, Hon. Henry Fairfax, of Loudoun county, who has long been prominent in advancing the agricultural interests of the State. Mr. Fairfax outlined the objects of the Association, described the preparations being made for the coming exhibition and enjoined all to attend, exhibit, and in other ways cooperate with the management in making the Fair a credit to the State.

The corn contest, designated "King Corn Special," inaugurated by the Times-Dispatch of Richmond, the object of which is to stimulate the growing of corn in Virginia for the purpose of exceeding the product of any other State in the East, has opened up a new field of endeavor for the farmer and is worthy of his greatest efforts. The sum to be distributed in prizes, which is being raised by public subscriptions, now amounts to nearly \$1,500, and it is expected to reach the \$2,000 mark by Fair time. On the basis of \$2,000 prizes will be awarded, approximately, as follows:

- |  |          |
|--|----------|
| 1. Best ear white corn grown in Virginia.....  | \$450 00 |
| 2. Best ten ears of same.....                  | 450 00   |
| 3. Best twenty ears of same.....               | 450 00   |
| 4. Best ear yellow corn grown in Virginia..... | 225 00   |
| 5. Best ten ears of same.....                  | 225 00   |
| 6. Best twenty ears of same.....               | 225 00   |

The awards will be based upon the perfection of the product and not upon yield by acreage, as has been supposed by some. There were a few growers who misunderstood the conditions, contending that the man who grows a few stalks of corn in a city back yard or country garden has as good chances of winning the prizes as the large producer who raises many acres. Nothing could be more erroneous, and the management of the Fair desires to dissipate this wrong impression. The question was thoroughly threshed out when the contest was inaugurated, and upon the advice of Hon. Henry Fairfax, of Loudoun county; T. O. Sandy, former President of the Virginia State Farmers' Institute, and many others of wide agricultural experience, including officials of the Department of Agriculture in Washington, it was decided for various reasons to focus the contest upon

(Continued on page 867.)



THE

# Southern Planter

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REMITTANCES should be made direct to this office, either by Registered Letter or Money Order, which will be at our risk. When made otherwise we cannot be responsible.

SUBSCRIBERS failing to receive their paper promptly and regularly will confer a favor by reporting the fact at once.

WE INVITE FARMERS to write us on any agricultural topic. We are always pleased to receive practical articles. Rejected matter will be returned on receipt of postage.

No anonymous communications or enquiries will receive attention. Address THE SOUTHERN PLANTER, RICHMOND, VA.

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## PUBLISHERS' NOTES.

## TO ADVERTISERS.

Please bear in mind that we must have all copy or instructions for advertisements by the 25th of each month without fail. Every month we are compelled to omit advertising in large volumes for the simple reason that copy does not reach us in time.

## A NEAT BINDER.

If you will send thirty cents to our business office, we will send you a neat binder made of substantial Bristol board, in which you can preserve an entire volume of the Southern Planter. Many of our readers find this a useful device, as they always save their copies for reference.

## A FARMER'S ACCOUNT BOOK.

We can furnish a very simple and complete account book for farmers' use for fifty cents, postpaid; or we will give a copy to every subscriber who will remit us \$1.00 for a three year subscription and ten cents to cover mailing.

This book contains records for labor, planting, buying, selling, breeding, and inventory and will last the average farmer for two or three years.

In the back of the book are gestation tables, rules for computing contents of corn cribs, hay stacks, etc.

## ROOFING FACTS FOR FARMERS.

The roofing question is becoming more and more complex every year. There are so many poor roofings on the market—and so few good ones—that it is well for our readers to be mighty careful of what they buy. The reason for so many poor roofings being on the market is because they all look alike. But looks are not what should make you decide on your roofing.

Among the roofings which have appealed to our readers is Breese Bros.' Rubber Roofing. It will pay to get samples of their 1, 2 and 3 ply to test in comparison with other roofing samples. Then, if you think Breese Bros. Rubber Roofing is as good as any, you will save money because Breese Bros. are actual manufacturers—sell direct to the user, and prepay freight charges East of the Western line of Minnesota, Iowa, Missouri, and North of the Southern line of Tennessee.

They guarantee satisfaction or money refunded. They also guarantee to ship your order same day it is received—and that it will arrive safely at your railroad station. But first send your name and address for liberal samples and free book. Ad-

## WOOD'S SEEDS.

Best qualities obtainable.

## Winter or Hairy Vetch

makes not only one of the largest-yielding and best winter feed and forage crops you can grow, but is also one of the best of soil-improvers, adding more nitrogen to the soil than any other winter crop.

Wood's Descriptive Fall Catalogue gives full information about this valuable crop; also about all other

## Farm & Garden Seeds

for Fall planting. Catalogue mailed free on request. Write for it.

**T. W. WOOD & SONS,**  
Seedsman, - Richmond, Va.

# RAFFIA

## Red Star and Arrow Brands

Bale lots of 225 lbs. each.

We are direct importers—stock always on hand. Write for special prices, stating quantity required. Sample sent on request.

McHUTCHISON &amp; COMPANY,

Raffia Importers,

17 Murray St.,

New York.

## FEARLESS Manure Spreader

The "FEARLESS" Spreader, built narrow, spreads wide, because the circular beater distributes outside the wheels. Covers evenly a six and one-half foot strip, spreading from a three foot box. Passes a farm gate easily as an ordinary heavy wagon. Means fewer trips to the field and no driving over manure already spread.

Write at once for free booklet.

HARDER MFG. COMPANY  
BOX 52  
Cobleskill, N.Y.

## FOR OUT DOOR WORK IN THE WETTEST WEATHER NOTHING EQUALS



TOWER'S  
FISH BRAND  
WATERPROOF  
OILED  
GARMENTS

THEY LOOK WELL—WEAR WELL  
AND WILL NOT LEAK

LONG COATS—\$3.00—\$3.50  
SUITS \$3.00

SOLD EVERYWHERE  
CATALOG FREE

A. J. TOWER CO. BOSTON, U.S.A.  
TOWER CANADIAN CO. LIMITED—TORONTO, CAN.

# BANK OF RICHMOND,

Main and Ninth Streets.

CAPITAL, \$1,000,000 00.

SURPLUS, \$475,000 00.

Special attention paid to out-of-town accounts. Correspondence invited.

Three per cent. Interest Allowed in Savings Department.

Compounded Semi-Annually.



## Knocks Out 7

Dairy Tubular Cream Separators are entirely different from all others—are simple, sanitary, satisfactory.

Mr. St. John Backus, of Sloan, Iowa, writes:—"I bought a Tubular 'A' No. 6. Before buying this separator, I tried seven makes. None was satisfactory, so decided to try your Tubular. I found it more than satisfactory and could I not have returned the other makes, as I did, I would have consigned them to the scrap pile."

Made in the world's greatest separator factory. Branch factories in Canada and Germany. Sales exceed most, if not all, others combined.

Write for catalog No. 290



**THE SHARPLES SEPARATOR CO.**  
West Chester, Pa. Chicago, Ill.  
Toronto, Can. San Francisco, Cal.  
Winnipeg, Can. Portland, Ore.



## Double The Quantity of Water

delivered by any other deep well cylinder pump, is raised by the "American"

### Deep Well Pump

The reason is it delivers the full capacity of the cylinder both on the DOWN-stroke and the UP-stroke making it actually double capacity. There's a revelation to pump users in our new Deep Well Pump Catalog.

**The American Well Works**  
Gen. Office & Works, Aurora, Ill.  
1st Nat. Bank Bldg., Chicago.

Sydnor Pump Company, Richmond, Virginia.



## FIX YOUR ROOF

**5c Per Square.**—We will guarantee to put any iron, steel, paper, felt, gravel or shingle roof in perfect condition, and keep it in perfect condition for 5c per square per year.

**Roof-Fix** The Perfect Roof Preserver, makes old, worn-out roofs new. Satisfaction guaranteed or money refunded. Our free roofing book tells all about it. Write for it today.

The Anderson Manufacturing Co., Dept. 61 Elyria, Ohio

**We Will Give A RURAL MAIL BOX.** The best and handsomest Galvanized Steel Rural Mail Box made, to the first person sending address of party passing for petitions for new Rural Route. Write today. W. H. B. BROS. CO., DEPT. 23, LOUISVILLE, KY.

Please mention the Southern Planter.

dress them—The Breese Bros. Co., Roofing Dept. 64, Cincinnati, Ohio—for prompt attention.

### WITH THE ADVERTISERS.

The Anderson Manufacturing Co. resumes its advertising of "Roof-Fix" and "Unito Roofing." See advertisements.

The Hercules Manufacturing Co. is advertising its well known stump puller this month.

The Union Carbide Sales Co., has an announcement on another page which should interest a number of our readers.

The Chicago House Wrecking Co. starts its fall advertising campaign with an attractive announcement on the second cover page.

The Kalamazoo Stove Co. is with us as usual, for the fall trade. Better let the Company send a "Kalamazoo direct to you."

Bargains in Buggies and Carriages are advertised by the Wilbur H. Murray Manufacturing Co.

The Brown Fence & Wire Co. has an attractive card in another column.

The Bucher & Gibbs Plow Co. is advertising its well known line of farm implements and machinery this season. The Implement Co. are the Richmond Agents.

The Interlocking Fence Co. is a new advertiser this month.

Dr. J. B. Tuttle, Craigsville, Va., is prepared to supply unlimited quantities of ground limestone rock. See "Want" ads.

Our long time patrons, the Kitselman Bros., are advertising their well known fence, commencing this month.

The National Lead Co. starts the fall advertising campaign with a prominent card on another page. Better send for paint test outfit, number 14.

The Castalia Stock Farm is advertising a nice lot of dairy cattle.

Shorthorn cattle can be had of Farmington Stock Farms. See ad on another page.

The Steel Shoe Co. has a prominent advertisement on another page.

F. W. Okie is advertising a splendid Suffolk Punch Stallion this month.

The Crestline Manufacturing Co. offers a full line of pumps for all purposes.

The Cambridge Corrugated Land Roller is advertised by R. F. Harris & Co.

Beautiful rugs and druggets can be had of the Virginia Rug and Drugget Co., at factory prices.

A Neat Binder for your back numbers can be had for 30 cents. Address our Business Department.

Always mention The Southern Planter when writing advertisers.

## Backed by 50 Years of Steady Improvement

Dederick Presses are backed by more than fifty years of careful experimenting and improving. They hold the world's records for neat, rapid and thorough work, and have always come out winners in contests with other presses.

### DEDERICK'S

#### Baling Presses

are strong, substantial, and durable—made in a modern factory by men who are press experts. They're the world's best, as well as first. Presses—the farmer's wisest choice. Our free Catalogue is full of facts about Presses and baling. Write for a copy—to-day.

P. K. DEDERICK'S SONS,  
55 TIVOLI ST.,  
ALBANY, N. Y.



## Self-Feed Eli Baling 3-Stroke Press

Latest addition to the great "Eli" family. Three strokes with automatic self-feed makes the gang hustle. Built on lines that make horse presses really valuable. Greatest leverage when pressure is hardest. Low Step-over, Full Circle, Block Signals, etc. A little giant in strength. We've always led as hay-press builders—18 different styles, horse and belt powers. All in one catalog and it's free. Write for it. Collins Plow Co., 1135 Hampshire St., Quincy, Ill.

### 1 MAN AND 1 HORSE

**BALE**

**1 TON AN HOUR**

### Bale at Least Cost

Our Daisy SELF-THREADING, self-feeding one-horse hay press only one on which one man can do all the work. First successful self-threading device, automatic condenser increases results. Open side hopper. Free trial. Write today for Baler Book and prices. GEO. ETEL CO., Quincy, Ill.

## The "MONARCH" STEEL STUMP PULLER.

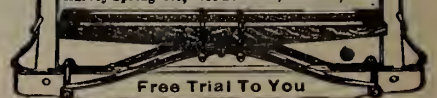


The best and simplest on earth. No cost to you, except freight, until it is set up and giving satisfaction. Nine years experience in this business. Write for catalogue and prices.

JOS. W. RITCHIE, Agent,  
Route 1, Grottoes, Va.

## HARVEY BOLSTER SPRINGS

Soon save their cost. Make every wagon a spring wagon, therefore fruit, vegetables, eggs, etc., bring more money. Ask for special proposition. Harvey Spring Co., 733 17th St., Racine, Wis.



Free Trial To You



# "OHIO" SILAGE CUTTERS

What do you know about Silage Cutters?

Which do you think is the best?

"Why do you think so?"

"Ohio" Silage Cutters give absolutely the best results. We believe we can prove this to you. Will you give us the chance?

Our big new "Ohio" book—the finest ever printed—will post you on Silage Cutter essentials. It's a beauty—104 pages—with 56 pages of photographs of "Ohio" Cutters at work everywhere. It will make you sure about

**"Ohio" Blower Silage Cutters**  
(6 Sizes—Cut 3 to 30 Tons an Hour—5 to 16 H.P.)  
about their dependability, capacity, durability and construction, power requirements, evenness and quality of the cut product, high class of users, prices, etc. Send for it today. Mailed free.

**The Silver Mfg. Co.**

Salem, Ohio

Modern Silage Methods,  
224 pages, 10c coin or stamps.



## A Modern Dumping Outfit

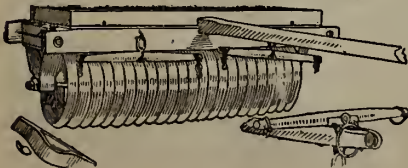


### Just the Thing for Road Building

Have your teamsters use this box, it will save time, no man needed to help unload, more trips per day, fits any gear, dumps load instantly, only costs one-third as much as dump wagons. In successful use throughout the United States. Investigate, by getting full information of

EVERETT MANUFACTURING CO.,  
32 Lake Street, Newark, New York.

## THE CAMBRIDGE CORRUGATED Land Roller and Pulverizer



### THE BEST IN THE WORLD.

Used by the State Test Farm, Virginia Agricultural College, Sweet Briar Institute, Miller M. L. School and some of the best farmers in the State.

Address:  
R. F. Harris & Co., Charlottesville, Va.

## VIRGINIA STATE FAIR.

(Continued from page 864.)

the grade of the product rather than the yield by acreage. Perfect corn is rarely grown by accident and is obtained only through scientific cultivation, the knowledge of which is born only of long experience in agriculture. In addition to this the average grower cannot distinguish a perfect ear of corn, many points being involved which require an expert to decide so that the man who grows a few stalks in a back yard has little show with the regular producers. The merits of the corn will be passed upon by an experienced and impartial judge from one of the Western corn expositions, who will, of course, take into consideration the difference of conditions in Virginia as compared with the Western States.

A perusal of the premium list shows that more than two-thirds of the total amount of \$40,000 appropriated is devoted to live stock and products of the farm. This is in strong contrast with the method of most Associations, who make a specialty of horse racing to the detriment of the agricultural interests. The Virginia State Fair, however, is, as its name implies, a Fair devised for the good of the State and the betterment of its farming conditions. Exhibitions of speed are, of course, a part of every Fair and necessary to their success, and liberal provision has been made for them at the coming exhibition, but not at the expense of one of the other departments. Horse races, however, are self-supporting, sufficient money being received in entrance fees and the customary percentages deducted from winners to pay all the purses without drawing upon the treasury of the Association.

Fruit growers will be interested in the immense display of apples which will be made by the State Horticultural Society. Eight hundred feet of space has been reserved for this mammoth collection which will include all the well known varieties. This fruit, however, will not compete for any of the premiums, the display being made for exhibition purposes only, as it is not the intention of the Society to reduce the chances of the regular growers of capturing the prizes. All the other fruits will be well represented and fine displays are expected from every part of the State. Other departments of the Fair will be equally interesting, and in each one will be found something new and surprising. All the principal farm products will be strongly featured and there will be a profusion of grains, grasses, vegetables, tobacco and dairy products. The tobacco exhibits will be especially fine, the premiums having been nearly doubled over former years, and the growers will vie with each other in a warm competition to car-

## SAVE YOUR BACK

Save time, horses, work and money by using an

### Electric Handy Wagon

Low wheels, broad tires. No living man can build a better. Book on "WheelSense" free. Electric Wheel Co., Box 146 Quincy, Ill.



## Wheels of Steel

Construction—that's the important thing in steel wheels. No spokes to rattle. No repair bills. Empire steel wheels are made to last a lifetime. Listen to one of our customers: "Gentlemen—I send you herewith order for 4 more wheels. The wheels I got from you 10 years ago are all right now. That's QUALITY." It's the Empire idea all thro'. Ask about Empire Wagons. Shall we send catalog? EMPIRE MFG. CO., Box 25A, QUINCY, ILLINOIS



## HARNESS BY MAIL

You can buy custom-made, oak-tanned harness direct from our factory, at wholesale prices. Save the dealers' profits. All our harness guaranteed. Money back if not satisfactory. Write for illustrated Catalogue O. and price list. Every farmer should have this booklet.

THE KING HARNESS COMPANY,  
16 Lake St. Owego, Tioga Co., N. Y.



### WHEELS, FREIGHT PAID \$8.75

for 4 Buggy Wheels, Steel Tires. With Rubber Tires, \$15.20. 1 mfg. wheels 1/2 to 4 in. tread. Buggy Tops \$5.50, Shafts \$2.00. Top Buggies \$23; Harness, \$5. Learn how to buy direct. Catalogue Free. Repair Wheels, \$5.50. Wagon Umbrella FREE. W. W. BOOR, Cincinnati, O.



BRASS  
Crestline  
Cylinder  
Pump.

Seldom do you buy a pump, but when you do buy why not get the BEST? That means Crestline.

Fig. 24 Nickel plated brass cylinder pitcher pump. Draws water 25 feet vertically and 50 feet horizontally.

Price each, No. 2 with 3-inch cylinder, \$3.

Price each, No. 3 with 3 1/2-inch cylinder, \$3.50.

Shipped immediately on receipt of price. Weighs 25 lbs. Fitted for standard 1 1/4-inch pipe.

1 1/4 Black pipe, per ft. cut to order, 7c.

1 1/4 Galvanized pipe, per ft. cut to order, 10c.

1 1/4 Black Elbows, each 10c.

1 1/4 Galvanized elbows, each, 15c.

It will pay you to buy our goods. The small difference in price is soon forgotten.

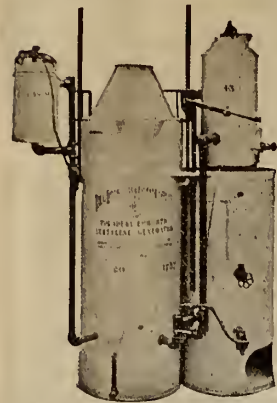
Ask your dealer or send order to us direct.

THE CRESTLINE MFG. CO.,  
Crestline, Ohio.

Please mention the Southern Planter.



## See That Generator?



**Get  
Good  
Light  
For  
The  
Price  
Of  
Bad.**

Be able to tell your blue dress from black. See while you are trying, without straining the eyes. No smoke, no globes to break or lamps to clean, or fall or explode; no danger of killing you while you sleep. Less work per month than one lamp. Costs less than Kerosene, and always ready at all times. We will send you one ready to put up. Write us to-day.

IDEAL EPWORTH ACETYLENE CO.,  
620 Elder St., JOHNSTOWN, PA.

**Breese Bros. RUBBER ROOFING**

**Freight Prepaid**

A better roofing cannot be made; all materials in B. B. Roofing are the best that can be had. Shipments direct at factory prices: One ply, 35-lb. roll, \$1.35; two ply, 45-lb. roll, \$1.85; three ply, 55-lb. roll, \$2.25, freight paid to all points east of the west line of Minnesota, Iowa and Missouri, and north of south line of Tennessee, on orders of four rolls or more.

**THE BREESSE BROS. CO.**  
Roofing Dept. 64 Cincinnati, O.

**Booklet Free**

## SAVE MONEY ON ROOFING

**\$1.00** buys full roll (108 sq. ft.) of strictly high grade roofing, either rubber or flint coat surface, with cement and nails complete.

Most liberal offer ever made on first class roofing. Better than goods that sell at much higher prices. Don't spend a dollar on roofing until you have seen

## UNITO ASPHALT ROOFING

You send no money when you order Unito Roofing. Satisfaction Guaranteed. Write today for free samples for test and comparison and our unparalleled selling plan.

**UNITED FACTORIES CO. Dept. A6, Cleveland, O.**



## MONTROSS METAL SHINGLES



Outlast all other roofings. Manufactured by us over 20 years. Fire, Lightning, Storm proof. Ornamental. Inexpensive. They do away with all roofing troubles. Free catalogue gives full information.

**MONTROSS METAL SHINGLE CO.,**

113 Erie St., Camden, N. J.

Please mention the Southern Planter.

ry off the honors. The liberal premiums offered for domestic products (including preserves and pickles), plants and flowers, needlework, paintings and children's work should encourage the wife and daughter of the farmer, as well as his children, to put forth their best efforts.

A great many of the counties in the State will be represented in the "county exhibits," which will be made up by individuals clubbing together and thus making one large display. Three premiums of \$100, \$75, and \$50 will be awarded for these county exhibits, which moneys may be divided up, pro rata, to the individual exhibitors. The articles so exhibited will not be barred from competing also for the separate prizes, as stipulated in the premium list.

Live stock breeders should not overlook the commendable action of the various Breeders' Associations of the United States in offering hundreds of dollars as well as many gold and silver medals and silver loving cups for the best horses, cattle, sheep, swine and poultry exhibited at the Fair, and it is to be hoped that the efforts of the Association to keep the largest live stock show on the Atlantic seaboard in Richmond, will be supplemented by much enthusiasm on the part of the breeders of the State. There will be a great display of agricultural implements and machinery on the grounds and demonstrations will be given each day.

The grounds of the Association have been recently enlarged by the addition of a seven acre tract on the side nearest Richmond city, on which will be constructed a "greater midway." By this re-arrangement of the grounds more "breathing space" will be provided and much of the crowding of former years eliminated. The exhibition buildings are being enlarged so as to provide more floor space for perishable exhibits and everything possible is being done for the comfort and safety of the public. The race course is in excellent condition and will require little work to prepare it for racing. The last day of the Fair will be devoted to an athletic meet, which is expected to be the greatest ever held in the South.

In conclusion, we wish to impress upon the reader the importance of making his entries early. There will be no fee charged in any but the live stock department. Let every farmer in the State, therefore, lend his heartiest co-operation in making the coming Fair truly great.

## WHAT A HEN WOULD DO—IF SHE COULD.

By nature, the hen is a very accommodating bird. She is willing to produce two hundred eggs a year, more or less, if she's given anything of a fair chance. The trouble is, Superior Man, her master, not understanding the complex requirements of her nature, doesn't give her a

## BARGAINS IN 2nd Hand Machinery.

For Sale by

## The Watt Plow Co.,

Richmond, Va.

One 8 H. P. Peerless Gelsner Engine and Boiler, on steel wheels, used two months, and as good as new.

One 8 H. P. Frick Eclipse Boiler and Engine, on wheels, in first-class order; just overhauled.

One 12 H. P. Amcs Engine and Boiler, on wheels, just overhauled in our shop, and in first-class shape.

One 25 H. P. detached Erie Engine, without boiler.

One 20 H. P. Peerless (Gelsner) Engine and Boiler, on steel wheels, used eighteen months, and in first-class condition in every way.

One American Combined Lath-Mill and Bolter, with two inserted Tooth-Lath Saws and one inserted Tooth Bolting Saw.

One 20-Inch Sweepstakes Planer, Matcher and Molder complete, with countershaft and pulleys.

One 12 H. P. Second-hand Lightning Balance Gasoline Engines, mounted, manufactured by the Kansas City Hay Press Co.

**THE WATT PLOW CO.,**  
1426 E. Main St., Richmond, Va.

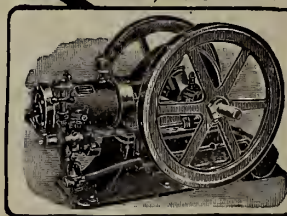
## CHEAPER FARM POWER

For the price of a good horse you can buy an ideal farm engine that will operate Feed Grinder, Cutter, Saw, Pump, Churn, Separator, Washing Machine and other machines to which belt can be attached. It eats no corn, does not get sick or die, can be moved whenever you wish, is always ready and eager to work.

A Star Gasoline Engine will cut out drudgery, save the tired back, and make life a pleasure. Made with standard tank, pump cooled, or hopper cooled.

Send for prices and illustrations and learn why the "Star" is a money-maker and time saver.

**The Star Manufacturing Co.,**  
Box 516, New Lexington, Ohio



**The STAR**  
A Heavy,  
Standard  
High-Grade  
Gasoline  
Engine

## BOILERS AND ENGINES.

16-horse Traction, \$300; 12-horse, \$250; 10-horse, \$200; boilers and engines from 2 to 100 horse, all styles and sizes, new and second hand; 4-horse gasoline engine, \$75; 8-horse \$150; 12-horse, \$200; Saw-Mill, \$135; boilers, tanks and smoke-stacks.

**CASEY BOILER WORKS,**  
Springfield, Ohio.

**Rockford Engine Works.**  
Dept 35, Rockford, Ill.  
The Engine that will please you

Before you contract or buy write for our proposition



**Nest-Nobby-Handy.**  
All Styles 2 to 30 h. p.

"ROCKFORD"

"ROCKFORD"



SEE

**"Rose for Ranges"**

The Famous Shadowless

**Angle Lamp**

Perfection in Oil Lighting.



No. 203, as illustrated, \$5.70.

The ANGLE LAMP gives more light, consuming less oil, than any lamp on the market.

Descriptive catalogue on application.

JOHN H. ROSE & CO.,

Everything in Housefurnishing Goods.

Richmond, Va.

**I'll Save You \$50**

**On a Manure Spreader**

**If You'll Let Me**

This is just a little ad—but a postal will bring my Big Book—and give you my \$50.00 Saving Price and Special Proposition. You can save as much answering this little advertisement as if it covered a page.

My Spreader positively will do better work and last longer than any Spreader made—no matter what the price—so why pay \$50 more? 20,000 farmers have stamped their O. K. on my spreader and money saving price. My Special Proposition will interest you. Just a postal addressed to Galway & Waterloo, Iowa, will bring you everything postpaid.

Will You Pay a Penny For The Postal and Save \$50.00?

Address Wm. Calloway, Pres.

WM. CALLOWAY CO.

219 Calloway St., Waterloo, Ia.



Freight Paid

**Monarch**

**Hydraulic Cider Press**

Great strength and capacity; all sizes; also gasoline engines, steam engines, sawmills, threshers. Catalog free.



Monarch Machinery Co., 510 Cortlandt Bldg., New York

**PILLING**

**Cattle Instrument Case**

"Easy to Use"—no Veterinary experience necessary. Contains \$3.00 Milk Fever Outfit and eight other "Easy to Use" Cattle Instruments needed by every cow owner. Complete in Oak Case \$10.00, regular value \$15.00, sent prepaid with "Easy to Use" directions on receipt of \$10.00. Send for Free Booklet "2B".

G. P. PILLING & SON CO., Arch St., Philadelphia, Pa.



**PLANET JR. GARDEN IMPLEMENTS.**

give bigger results with half the work. Illustrated 1909 catalogue free.

S. L. ALLEN & CO.,

Box 1107X, Philadelphia, Pa.

ghost of a chance—in a great many cases, at least.

In all soberness, the trouble in the poultry business to-day is lack of understanding. Men think that if a hen gets corn and water in abundance, eggs should be forthcoming in equal quantity. They don't realize that corn alone 's not a good egg food, nor do they grasp the further fact that the imprisoned hen lacks much that she would help herself to if at liberty—things which are absolutely essential to egg production.

Once these truths are understood there is an effort made to right the wrongs of the hen and collect her dividends; but here, again, there is often a mistake.

One thing, and one thing alone, is life and health to the poultry business—"The Dr. Hess Idea." Build on that, and success follows; ignore it, and failure is certain.

In a nutshell, "The Dr. Hess Idea" is this—good digestion is the foundation of all satisfactory growth and production in the animal world. Without the ability to properly digest and assimilate food, neither bird nor animal can produce a proper return for the ration given. With good digestion there is regular and constant return.

Dr. Hess Poultry Pan-a-cea does for the hen what the careless poultryman fails to do—it provides all the needed elements for growth and egg production because it aids digestion. It is a tonic. In it are iron, always a blood builder; bitter tonics, good for the digestive organs; and nitrates, without which the waste of the body would remain to poison the system and bring disease.

And, lastly, there's no risk about it. If it doesn't "make good," you don't have to pay for Dr. Hess Poultry Pan-a-cea.

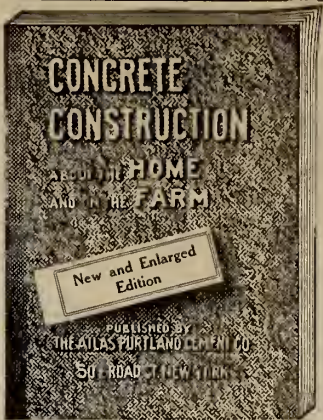
**FREE SAMPLE OF AMATITE.**

Many of the readers of this paper may not know that the makers of Amatite roofing distribute free samples for the information of prospective purchasers.

Some of our readers have probably doubted that a roofing could be made which would need no painting, and the sample of Amatite is convincing evidence that a practical mineral surface has been invented.

Sending for the free sample does not entail any obligations, and there is no charge—not even for postage. With the sample is sent a little book telling all about Amatite and showing pictures of roofs in all parts of the country where Amatite has given protection without painting for many years.

Just drop a postal card to the nearest office of the Barrett Mfg. Co., New York, Chicago, Philadelphia, Boston, St. Louis, Cleveland, Pittsburg, Cincinnati, Minneapolis, Kansas City, or New Orleans.



**Our NEW and Enlarged CEMENT BOOK**

**Free to Every Farmer**

This new, enlarged, and completely illustrated book, just issued in a new edition by The Atlas Portland Cement Company, tells how you can use concrete to the best advantage in all your construction work; how you can save money, yet have better, safer and more permanent buildings.

**"Concrete Construction About the Home and on the Farm."**

Is now used as an instruction book in many of the leading Agricultural Colleges.. It contains hundreds of pictures (actual photographs) of buildings that farmers and others have built without the aid of skilled labor. It is an improvement over all previous issues, as it describes and illustrates all the new ways of using concrete.

**ATLAS**

**Portland Cement**

**Makes the Best Concrete**

As it never varies in color, fineness, hardness, or strength, and is made from the genuine raw materials.

The U. S. Government ordered 4,500,000 barrels of ATLAS for the Panama Canal.. You get the same cement the Government gets, as there is only one quality of ATLAS manufactured—the best that can be made and the same for everybody.


Send for the book now, and get the benefit of many new ideas for this year's building work.

Ask your dealer for ATLAS. If he cannot supply you write to

The ATLAS Portland CEMENT Co.

Dep't 116, 30 Broad St., New York

Daily output over 40,000 barrels the largest in the World.



**NONE JUST AS GOOD.**

Please mention the Southern Planter



## SHIP ME YOUR OLD METALS

### HIDES

### RUBBER

## SCRAP IRON

Car Lots a Specialty

# 50,000 Hides Wanted

Write for Prices.  
Satisfaction Guaranteed.  
No Commissions.

CHECKS SENT SAME  
DAY FREIGHT BILLS  
ARE MARKED PAID.

## Clarence Cosby,

Established 1890.

RICHMOND, VA.

LARGEST DEALER IN  
Scrap Iron, Metals, Hides,  
Etc., in the South.

#### REFERENCES:

National Bank of Virginia,  
Bank of Richmond,  
Bradstreets and Dun

#### SILAGE FOR HORSES.

When fed in small quantities, not to exceed fifteen pounds a day, silage is a good food for horses. It should be fed twice a day, a light feeding being given at first and gradually increased as the animal becomes accustomed to the food. Some farmers feed it mixed with cut straw, two-thirds of straw, and one-third of silage, and feed, all horses will eat of this mixed feed. Some horses object to silage at first on account of its peculiar odor, but, by sprinkling some oats or bran on top of the silage and feeding only very small amounts to begin with, they soon learn to eat and relish it. Other horses take it willingly from the beginning. Horses not working may be fed larger quantities than work horses, but in neither case should the silage form more than a portion of the coarse feed fed to the horses. Silage-fed horses will look well and come out in the spring in better condition than when fed almost any other food.

Professor Cook says in regard to silage as a horse food: "It has been suggested by even men of high scientific attainments that silage is pre-eminently the food for cattle and not for other farm stock. This is certainly, a mistake. If we raise fall colts, which I find very profitable, then silage is just what we need, and will enable us to produce colts as excellent as though dropped in the spring. This gives us our brood mares in first class trim for the hard summer's work. I find silage just as good for young colts and other horses."

The foregoing article appears on pages 153 and 154 of "Modern Silage Methods," a 224 page book published by the Silver Mfg. Co., Salem, Ohio. Every reader of this paper should read their ad. on another page.

#### WATER FACILITIES.

In summer especially the quantity and quality of water is regulated on most farms by the well and the pumping equipment. Disease and shrinking in weight affects all live stock on the farm when the water is lacking. To provide deep wells with never failing pure water and to do the pumping, the machinery and equipment of the American Well Works, Aurora, Illinois, is always adequate. All who are interested should write for their large illustrated catalogue, mentioning this paper.

#### KEEP THE BOY ON THE FARM.

Man is a gregarious animal. He loves to mingle with his fellow kind. He dreads isolation and solitude, consequently he hunts the place where the greatest number of people congregate in the smallest space—the city. (This is the theorists' reason for so many country boys going to the city.) Here he gratifies the in-born instinct to rub up against his

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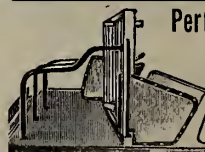
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fellow kind to his heart's content. Sometimes he smooths off the rough edges, becomes a polished magnate, and is heralded from one end of the land to the other as a great man—born on the farm—country-bred—raised himself from obscurity to the pinnacle of fame.

Oh! oh! This is indeed a great commendation for the country-bred youth, and for the country. But, how many of all the lads who leave a good country home for the city ever reach this high place in life? Judging from the meagre statistics at hand, the ratio is about one in a thousand. Consider, young man, the great odds against one in a thousand! The rank and file of country lads who migrate to the city merely fill in the cogs of corporation machinery wheels which keep grinding away with the same monotonous regularity year after year. This is what the city offers to the average youth. There is none of that free and independent spirit which distinguishes the country cousin from his city relative. Yes; he satisfies that inborn craving to mingle with his fellow kind—that is all. He learns more general cussedness in six months than the pure air country boy could learn in a lifetime. He loses that independence and good spirit which characterized his country days, and he lives in a small, dark room with a few, if any, comforts.

Why does the boy leave the farm? Because he is a gregarious animal. Not much—in nine cases out of ten it is because he loses interest in country life. There is all the opportunity to rub up against his fellow kind in the country that any country youth needs.

Why does he lose interest in the country?

There are a great many reasons, and the greatest of these is the lack of proper recreation. It is a mighty tough proposition to toil all the day long in the hot sun, and at night when the chores are done lounge around the house until bed time. The mind is not in a very receptive or pleasant mood. This is when the youth begins to brood and ponder upon his luck. He says, "Why cannot I get out of this drudgery and have a glimpse of 'Dolly Footlights' like my cousin John over in Chicago?" and before he realizes the magnitude of the step, he bids his father, mother, brothers and sisters adieu and winds his way to the city.

There is a way to stop this unnatural migration, and strange as it may seem, it is nothing more or less than the automobile or auto buggy. Every farmer who has a son stricken with city fever, will find in an automobile the surest remedy for a speedy cure.

A farmer speaking about his four sons said that all of them got the city fever. The oldest left the farm about six months ago and got a good job in Chicago. The father found that the other boys were getting rest-

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## ANNOUNCEMENT

Having completed the greater portion of the work on hand at the time of the withdrawal of my last notice, I wish to announce that I am again ready to take up my advisory work along agricultural lines, either by correspondence or personal visits, and I invite all those experienced farmers who are unprofitably employed, and the inexperienced, who are in doubt as to the best mode of procedure, to write for terms. My charges, even including traveling expenses, are in the reach of every man who desires to profitably cultivate 100 acres of land. Crop rotation, balanced rations and fertilizer formulae are my specialties.

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less and decided to buy a car. Speaking in his own language he says, "The up-shot of the whole matter is that the three boys learned to run the machine, and we take a ride every night after the chores are done. They got to writing their brother in Chicago about the fun they were having and he came home last week. Said he guessed the farm was good enough for him. This pleased his mother mightily."

It surely did, and the father, too, for that matter. There won't be any more grumbling about hard work in that family. Every night they take a spin of 25 or 30 miles, and thoroughly enjoy every inch of it. When the atmosphere is hot, the family rid themselves of the irksomeness and closeness of the house, and when they are spinning along the road they inhale that life-giving oxygen which is so essential in rebuilding the broken down tissues of the human body. This is just the kind of recreation the country youth needs. It makes the eye sparkle and the nerves tingle with enjoyment. There is exhilaration in being at the wheel, in operating the brake, clutch, spark and gas control.

It requires skill to run a car economically. This the boy acquires and he is gaining a knowledge of gas engines that is invaluable to him. He takes an interest in good roads, because much of the pleasure in automobiling depends upon good roads. When he returns from a spin, the tired feeling has disappeared. He retires, sleeps soundly, and the next morning he is in a cheerful frame of mind and ready for a hard day's work.

The family talk about the previous night's ride when they are assembled around the table. They have travelled sections of their own country they never had seen before. They have called upon their neighbors 15 miles away, and are taking the ride over again in their happy imaginations. Laughter, instead of dismal forebodings, and a keen interest in everything that pertains to country life, is the order of things in that household now.

Why shouldn't it be?

That farmer has rural mail delivery, telephone and the country huckster wagon delivers groceries to his kitchen door twice a week. After he purchased his automobile, he broke the last thread that separated him from the rest of mankind, and virtually made himself a much-to-be-envied suburbanite. It enabled him to give vent to that gregariousness in his make-up and mingle with his 15 mile neighbors to his heart's content: it practically annihilated distance so that the farmer and his family visit all the neighboring county fairs.

What happened to this family in the purchase of their automobile will happen to every farmer who buys one. The good thing about it all is this engine driven vehicle is within

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340 acres, on R. F. & P. R. R., midway between Richmond and Washington D. C., 225 acres cleared and in cultivation, large house and other buildings in fine large grove and splendid fruit, \$10,000.

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the means of every farmer. A good car can be bought for \$600 to \$1,000, and one, too, that is built especially for country roads. Such a car is cheap to operate and ready for service any minute in the day. The cost is so reasonable no farm can complain that the application of the automobile cure for his son's attack of city fever is too expensive.

No farmer can do too much to keep his boy on the farm. The greatest economical and social problems the world has ever been troubled with are being threshed out on the farm, and it requires greater brains to solve these problems than it does to run a great corporation. Let the boy go to college. Give him a knowledge of Greek, Latin, mathematics and science. It won't do him any harm to read in the Roman's own language how the great men of the Roman Empire were farmers; how the elite lived in country homes and tilled the soil. An education of this character will do him no harm; but, above all, give him the best knowledge of soil and farming that is known to modern farm science. This will place him in position to become a man among men. But just the moment you notice the symptoms of "cityitis" or city fever, give him a dose of the automobile cure. It is the most effective remedy for this too frequent malady among our country lads.

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Farmers whose wagons are in good serviceable condition, with the exception of the wheels, will be glad to know that they can, at very small expense, make them better than new. All that is required is to remove the old wooden wheels and put on a set of steel wheels. No one thing pays better in actual dollars and cents than wide tire steel wheels. No warping, cracking or dropping of tires. Sun and storm proof, they will last a lifetime. Every farmer is no doubt interested in this subject, and to find out just what a set of steel wheels will cost, and to learn all about Farmers' Handy Wagons, the greatest ever built for farm use, he would do well to write to The Empire Mfg. Co., Box 25A, Quincy, Ill., for a copy of their booklet on wheels and wagons. This booklet is a veritable encyclopedia of information and will prove of interest to every reader of this paper. It is mailed free.

### VIRGINIA TO MAKE A STUDY OF FOREST CONDITIONS.

Washington, June.—Virginia is making good progress in the movement for the preservation of its forests. A co-operative agreement for a scientific study of the forest conditions of the State has just been entered

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No. 194. Contains 175 acres, 25 acres in good timber, balance is cleared, 9 acres in orchard in full bearing, good six-room house, old barn, good granary, hen houses, dwelling in a grand oak shaded lawn, spring at house, farm watered by streams and springs, situated on good pike. One hour's drive from Leesburg, Va. Owner is anxious to sell. Price \$3,500.

No. 208—600 acres Loudoun Blue Grass land, 8-room brick house, in good repair, farm well fenced, elegantly watered, excellent bank barn, good orchard, fine timber. Price \$25.00 per acre.

No. 201—406 acres, Loudoun Blue Grass farm 8-room brick and frame dwelling, elegant repairs, excellent barn 40x100, water in every field, well fenced, good orchard. Price \$10,500.

No. 202—475 acres, Blue Grass land, small 5-room house, land is good, well fenced, excellent water, good small orchard, excellent situation, but buildings are only fair condition. Price, \$9,000.

No. 209.—206 acres, beautiful little Loudoun County farm, 6-room dwelling, beautiful shaded lawn, water in all fields, good fences, land is smooth and level, good barn and outbuildings. Price \$6,500.

No. 210.—273 acres, Loudoun blue grass land, well located in grazing section, excellent orchard, well watered, 6-room house and outbuildings in fair condition. Price \$13.50 per acre.

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into by Governor Swanson and the United States Forest Service.

Governor Swanson is much interested in the different forest problems and enthusiastic in his desire to improve the forest conditions of the State. Last year he appointed a commission of seven members to investigate and consider the needs of the State along forestry lines. In the estimation of the Governor there are specific and technical forestry problems of great importance to be considered in this co-operative study. The mountain forests, already cut over, and the level coastal plains, now in cultivation or in forest growth, present a number of problems for investigation. The great need in Virginia is to bring before the farmers the importance of caring for and maintaining their woodlots. In many places little or no attention is paid to second growth, and consequently no attempt is made to protect it from fire or give it proper treatment. It is a common practice to cultivate the land for tobacco a few years, and then, when the soil is worn out, allow it to seed up to pine or other tree growth. When the land is rejuvenated, it is often brought under cultivation again. In this way a splendid growth of young pines is often cleared off, when, with proper treatment and care for a few years longer, the timber would be of considerable commercial value. These woodlots, especially on slopes, are necessary to prevent soil erosion.

In a letter addressed to the Associate Forester, received by the Forest Service, Governor Swanson says: "I am deeply interested in encouraging the preservation of the present forests and the growth of new forests within the State. From observation it seems to me that this State, if properly and scientifically treated, would very rapidly reforest itself, much to the advantage of the entire State and to the profit of the owners of the soil. I am desirous of having a scientific examination to ascertain the best means of accomplishing this; the best places where new forests should grow; the best means of preserving them, and suggestions as to general scientific treatment. I believe incalculable good could be done in this State if this subject was taken up in a broad and scientific way. I look forward with much gratification to this work, and feel sure the results will be very beneficial to the State."

This study will begin in July, and will be in charge of W. W. Ashe, until recently Forester of the North Carolina Geological Survey. Mr. Ashe is a skilled forester, a resident of Virginia and exceedingly well informed on the forest conditions of the State. Virginia and the Forest Service will share equally the cost of the examination.

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## Farms for Sale.

**\$16,000.**—Contains 346 acres, 50 acres timber, balance in blue grass sod, excepting some small crops. Good orchard consisting of standard varieties of apple and pear trees. Soil is cecil or chocolate clay. Watered with mountain springs and streams. Is conveniently divided into fields, and is substantially fenced with woven wire and locust post. Situated right at railway station. Incorporated town at foot of mountains. Macadamized road divides the farm and passes directly in front of lawn and dwelling. Improvements: 9-room Colonial dwelling, one bath-room—hot and cold water in bath and pantry; front and back stairway, two halls and reception hall; cellar under entire dwelling, out-kitchen, servants' room, ice-house. Dwelling is surrounded with large and sloping lawn; delightful shade, consisting of numerous varieties of choice trees. Stone entrance. Two large barns, about 40x60 feet, in perfect condition; two tenant houses, hog house, corn house, chicken house, implement house and wood house are among the outbuildings.

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**\$3,500.**—Contains 120 acres, 25 acres in timber, balance in grass and under cultivation. Situated on Potomac River, 3½ miles of railway station, in Loudoun county, Va. Is well fenced and conveniently divided into fields. Improvements: Eight-room dwelling, porches, shade, large lawn; new barn 20x26 feet; spring house, garden, small fruits.

**\$3,200.**—Contains 90 acres, all cleared, and directly adjoins 120-acre farm above described; is without improvements; situated right on Potomac River.

Send for my Catalogue of Northern Virginia farms. I would be glad to see you at my place by appointment.

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400 acres—300 cultivated and fenced into 20-acre fields. Springs and running water; 11-room dwelling; located in beautiful grove; valuable outbuildings, close to schools, churches, stores; 3 miles to double track trunk line. R. R. \$5,500.

34 acres—Dwelling, barn, orchard, 17 acres in cultivation, balance in wood, 3 miles to electric and steam R. R.; crop and stock to go with farm. \$1,350.

75 acres—Neat dwelling in pretty grove, orchard. Outbuildings, store, fine neighborhood, 8 miles to R. R. \$1,500.

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## FARMS-NEAR-WASHINGTON, D. C.

82. Eight hundred acres in Prince William county, 35 miles from railroad; convenient to churches, school, mill, etc.; all fenced; four hundred acres in timber, four hundred acres of good grass land, especially suited for stock or dairying; smooth and free from rocks, borders on stream, nine fields well watered, small orchard. Excellent residence beautifully situated in eight acres of lawn; two story frame with hall in middle, hot and cold water in pantry, bath room with all modern improvements. Good two-story frame servants' house nearby. Fair barn 52 x30 and all necessary outbuildings. Bored well and also windmill with two large storage tanks, and cistern. Seven room tenant house, with barn, well and outbuildings. This desirable farm has just been put in my hands for sale. Price only \$25 per acre for whole or will sell part at a price, according to location, improvements, etc. One-third down, balance on easy terms.

77. Three hundred acres, 3 miles from railroad, in Loudoun Co., in a high state of cultivation, well fenced, plenty of fruit, running streams and springs; on pike, fine large colonial house, lawn and shade, large barn with basement, necessary outbuildings. This is considered one of the best stock farms in the county, and a bargain. Price \$63 per acre; \$60 has been offered for this place; worth \$100, on easy terms.

64. Four hundred and sixty-nine acres in Fairfax Co., 5 miles from railroad, 7 miles from electric line; 200 acres in timber, mostly oak, balance in crops and grass, crops to go to purchaser; clay soil, just rolling enough to drain well. Two houses and two barns; new house of eight rooms, old house of five rooms. Including stock, farm implements, crops and everything. Price \$11,000, on very easy terms. Make us an offer.

264 acres in Fairfax Co., 6 miles from rail over good roads; close to school and church; 51 acres in timber; fine fencing; 2 lasting streams and springs; all kinds of fruit; colonial house of 8 rooms in excellent condition; beautiful grove. Fair barn 24x30, and all necessary outbuildings; located on pike 7 miles from electric line; best red clay—blue grass land, just rolling enough to drain well, best of neighbors. Price \$10,500 if sold at once.

47. Three hundred and thirty-five acres, a very desirable farm, in good section of upper Loudoun, 7 miles from station; two hundred acres in grass, thirty-five acres timber, soil clay loam, especially adapted to grass, finely watered by springs and running streams, well fenced by wire and rail into convenient fields, choice fruit of all kinds, fourteen-room dwelling of brick and frame, front of well-shaded lawn; large basement barn and all necessary farm buildings. This will make a first-class grazing farm. Price \$25 per acre. On easy terms. Make us an offer.

374 acres in Fairfax Co., 8 miles

from rail; 22 miles from Washington, 1 mile from school and church; 7 fields well watered with springs and streams; 250 apple and peach trees; excellent house of 7 rooms; barn and all necessary outbuildings. Price \$25 per acre. 12 acres in rye, 28 in wheat, 75 acres in corn go with the farm.

44. 277 acres in good state of cultivation, just rolling enough; in a good neighborhood, 5 miles from railroad, in Loudoun county, 70 acres in timber, mostly oak, part of it first-class; faces on two roads; has been operated as a cattle, sheep and hog farm for 25 years. On account of old age the owner is offering his farm for much less than its true value; is well fenced two houses in first-class condition, one 10-room house, the other 6 rooms, large barn and all necessary outbuildings. Price \$8,000. One-third down, balance to suit. This is one of the biggest bargains I have.

114 acres, 3 miles from rail in Loudoun county, on a good road; divided into 5 fields—water in every field; all limed except one field; old time house but comfortable; spring water in house; excellent bank barn, with 2-story cow house attached; stanchions for 4 cows; corn crib, wagon house, etc. fairly good orchard. Adjoining saw and grist mill. \$7,350 if sold at once.

A desirable home—130 acres on pike close to graded school, convenient to Washington, D. C., 6 miles from rail; new 6-room house and barn. The land is smooth and rolling free from rock and easy to work. Will grow any kind of crops. One field that has been limed, now in clover, will show you what can be done on the whole farm. Lasting stream running through place. Fine apple and peach orchard, besides other fruits. Possession can be had in a reasonable time. Price \$7,000 on easy terms if desired.

Dairy farm—100 acres in the corporation of Herndon, on macadam road surrounded by the most desirable neighbors. In a high state of cultivation, all in grass; improvements, including tenant house, horse barn, cow barn with stanchions for 60 cows, carriage and wagon shed, feed rooms, and milk house with separator that cost \$200. Finely watered, just rolling enough and free from rock. The most desirable proposition to be had in this section. Price \$7,000 on easy terms if desired.

41. 264 acres four miles from station, in Loudoun county. Thirty acres in timber, artesian well, three never-failing springs, 7-room house, barn and outbuildings fair. A fine stock farm, paying 12 per cent. on investment, in high state of cultivation. Price \$6,500 \$2,500 down, balance to suit.

42. Three hundred and twenty-three acres, in the best section of Loudoun county, surrounded by high priced and beautiful farms, 7 miles from railroad, 1 mile from fine pike, 1 mile from post-office and 2 miles from school; sixty acres in timber, well fenced and divid-

ed into nine fields, with water in every field—large stream through place. Two good houses, one of seven rooms and the other of five rooms; fine tenant house of four rooms, two new barns, one 35x45, the other 30x40; all necessary outbuildings in good condition. This is a fine blue grass stock farm, and the biggest bargain we have. Price \$6,500, \$2,000 down, balance to suit. Make us an offer.

54 acres on electric line, 1½ mile from railroad, ¾ mile from school and church; 14 acres in timber, balance under cultivation; running stream, 7-room house in good condition; good barn, 4-room tenant house, and all other necessary outbuildings; young orchard. Price \$6,000.

227 acres 4½ miles from rail over macadam road; mostly in timber, about 100 acres scattered over the whole—white oak, hickory, and some valuable cedar; about the only small tract in this section for sale that has not been cut over for a great many years. About 50 acres could be easily cleared up to be put under cultivation. Well watered and surrounded by high-priced farms—smooth, free from stones and not hilly—easy to work. The location makes it very desirable for a farm, after the timber is taken off, and the timber will come close to paying for it. Just the thing for a man who has had some experience in getting out timber and wants a good farm that has never been worked. Price \$25 per acre. Will consider an offer for the timber alone.

Must be sold at once—142 acres convenient to rail, close to pike, 22 miles from Washington, D. C., 7 miles from electric line; 8 acres in oak timber. Large 8-room house, barn and outbuildings in fair condition; two wells close to house; beautiful lawn and shade; plenty of fruit; elevation and location where house stands could not be better; school and church in sight of house; naturally good strong land; liming is all it needs to make it produce first-class crops; lasting stream of water running through farm so that every field could have running water. 30 acres of corn to go with the place. Possession to be had at once. Price, \$5,500, \$1,250 down, \$700 more Jan. 1—balance in five years. No reasonable offer will be refused.

Small dairy farm—43 acres, 3 miles from rail over macadam road; close to village store, fine graded school, churches, and blacksmith shop—very desirable neighborhood; good improvements; fine orchard; lasting spring. 10 cows could be run very profitably on this small farm. Price \$3,800. Make an offer for the owner is very anxious to sell.

100 acres on pike 5 miles from rail, 22 miles from Washington, D. C.; 7 miles from electric line; colonial house was famous as a headquarters for one of the generals during the Civil War; beautiful lawn and virgin oak trees for shade. This would make a beautiful home and farm combined. Price \$3,200.

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The "Perfection" is an oil heater, handsomely finished in Japan and nickel, and is equipped with a patent burner and smokeless device which prevents the flame being turned too high or low, and the heater from smoking.

With the "Perfection" at hand you can in a few minutes warm any room or hall in the house that happens to be cold. It will supply sufficient heat when it is too warm to run the regular furnace and too cold to do without heat entirely, and will prove a great factor in improving the comfort and, furthermore, saving trouble and expense in any household.

At night there is nothing that will add more to the real comfort and coziness of a home than the Rayo Lamp. It gives a clear, steady light, perfect for reading or sewing, or any purpose and suitable for any room. It has latest improved burners and is an unusually safe, clean lamp for household use. Being made entirely of metal except the shade, the danger of carrying a glass lamp about is eliminated by its use.

Perfection Heaters and Rayo Lamps are sold by all dealers.

### A MAGAZINE OF MERIT.

Having rounded out its first five hundred months of existence with the August number, Lippincott's Magazine starts out with September as though it could see a far longer vista of months and years of life ahead of it. And there is no reason why it shouldn't, so long as its present high quality is sustained.

The novelette for September has a surprising plot, and is called "A Bride for Casey." Ella Middleton Tybout stands sponsor for it, and those who have read her books, "The Smugler," "The Wife of the Ambassador," etc., can testify that she knows how to write a good story. "Casey" is one of four impecunious young society men living in New York. In order to acquire the cash necessary to carry out cherished plans, it is decided that Casey must marry a rich girl, and the others undertake to find him a suitable mate. It becomes necessary at one stage to dispose of the maiden aunt of a certain young lady, so they contrive to ship her off to Boston until her presence is no longer a menace. Her disappearance helps things along, for charges of robbery, abduction and murder are promptly brought against the quartet by the police. The end is unexpected to everybody—and to Casey most of all.

## FARM BARGAINS

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TRUCK FARM—49 acres without improvements close to Herndon; this will suit some one who wants to build and live just outside the village. The soil is suitable for trucking and would make an ideal poultry farm. Lasting stream borders on two sides. There is timber enough to build improvements at a very little cost. Price \$40 per acre. Terms to suit purchaser.

4-room house with 1 acre of ground in Fairfax Co.; house well built, with porches; well under back porch; location high and healthy; soil sandy loam, suitable for fruit and poultry; good shade around house; neighbors close; hen house 12x18. Price \$1,800.

19½ acres 5 miles from rail, and 6 miles from electric line; close to school and good neighbors; 11½ acres in second growth timber; land well fenced; splendidly watered with lasting stream spring, and well; good orchard. Good house of four rooms, good barn and outbuildings. Owner wants larger property. Price \$1,000—half down, balance in 2 years.

27½ acres 5 miles from rail, 6 miles from electric line; 10 acres in good timber; school and church close by; all fenced; fine spring and running water clear through place; 10 acres in all kinds of fruit; fairly good house of 5 rooms; fair corn house and cow shed; price \$800. Loan of \$300 now on the place. Good neighbors.

See Page Ad. in This Issue

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A few minutes' pumping stores enough water under air pressure to force it anywhere. Running water throughout the home—for kitchen, bathroom and laundry. Send for detailed information. JOHNSTON MFG. CO.,  
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Beadle Co., S. Dak., March 6, '09.

I received the sample copy of the Southern Planter and I cannot express in words the high opinion I have of it. It is simply perfect.

W. B. TAYLOR.



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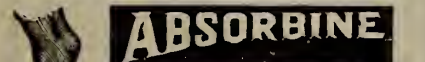


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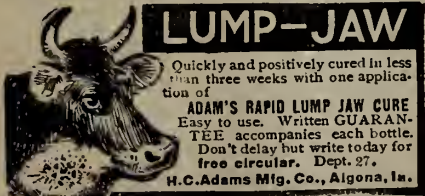
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DEATH TO HEAVES  
Cures Hoarseness, Cough & Newton's Distemper Cure Guaranteed or Money Back. \$1.00 per can at dealers, or Express Paid, 18 Yrs' Sale. THE NEWTON REMEDY CO. Toledo, Ohio.

The characters are splendidly drawn even the minor ones, and the whole tale is invested with an air of plausibility, despite the preposterous plot.

The September short stories are a strong collection. "What Happened to Father" is an amusing yarn by May Roberts Rinehart, whose books, "The Man in Lower Ten" and "The Circular Staircase," have recently brought her fame and fortune. "Aunt Dianthy," a powerful yet pathetic tale of a neglected old woman, is by George Allan England. Other noteworthy stories are "A Question of Honor," by Hornor Cotes; "The Shadow of Molly Kinshela," by Josephine Van Tassel Bruorton; "Between Trains," by Thomas L. Masson; "The Death Sentence," by Caroline Ticknor; and "An Unwilling Intrusion," by Percy Wilson. Thomas L. Masson also contributes a blithe sketch called "When to Tell the Parents," which will be enjoyed by all fathers and mothers, and by some children.

What promises to be the greatest boom to poultry in the South and Southwest is the first annual show of the Tri-State Poultry Association, to be held in connection with the Tri-State Fair at Memphis, Tenn., September 28 to October 9, 1909. This show will be held in a handsome new building dedicated to the use of poultry alone. The premium list will be the largest and most liberal ever offered by any fair show in the South. As the show represents a section of the country which has been backward in poultry, it is the desire to have the latest things in poultry demonstrated. All the people of this section need is education and encouragement, and after they receive these poultry will boom. The Tri-State show is going to advertise the exhibition all over the South and Southwest, and hopes to establish a new record in attendance figures for "first show." R. C. Stockton is secretary.

As to the amount of pasturage or the number of hogs, alfalfa will carry per acre without injury to the crop, the estimates given by farmers vary considerably, depending on the kind of soil, the fertility of the land, and the size of the hogs pastured. The following, however, is a safe estimate as given by conservative men who have had much experience. River, valley and creek bottom land, well set in alfalfa, will carry from 15 to 20 head per acre of 50 to 125-pound hogs. Upland of fair average fertility will support from eight to ten head of the same kind of hogs. There are fields that have supported 25 head per acre through the season for a number of years and are still in good condition, and there are other fields that will not furnish pasture for more than five head per acre; but these are extremes. When a field is only used for pasture it is better to divide it

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A Safe, Speedy and Positive Cure for Curb, Splint, Sweeny, Capped Hock, Strained Tendons, Founder, Wind Puffs, and all lameness from Spavin, Ringbone and other bony tumors. Cures all skin diseases or Parasites, Thrush, Diphtheria. Removes all Bunions from Horses or Cattle.

As a Human Remedy for Rheumatism, Sprains, Sore Throat, etc., it is invaluable. Every bottle of Caustic Balsam sold is warranted to give satisfaction. Price \$1.50 per bottle. Sold by druggists, or sent by express, charges paid, with full directions for its use. Send for descriptive circulars; testimonials, etc. Address

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is the "real" article that has stood the test for 25 years. Has no superior for destroying lice. It saves the hens and increases Poultry Profits. Try it and be convinced. Sample 10 cts. If your dealer cannot supply you, send us his name. "Modern Poultry Problems" mailed for 2c stamp.

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Stomach-Worm Remedy  
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The Great Internal  
PARASITICIDE.

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A Neat Binder for your back numbers can be had for 30 cents. Address our Business Department.



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Grains, Vetches, Alfalfa, and all  
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germination. Poultry Foods and  
Supplies.Write to-day for our free cata-  
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**SEED WHEAT**I offer for sale 180 bushels of **Leap's**  
**Prolific Seed Wheat** at \$1.60 per bushel  
of 60 lbs., bags included. It yielded  
this year 30 bushels per acre.**W. M. WATKINS,****Saxe, Va.****APPLER OATS**

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\$1.00. Address,**SOUTHERN PLANTER,**  
Richmond, Va.into several lots and move the hogs  
from one to the other as occasion re-  
quires.—From Coburn's "Swine in  
America."**NURSE CROP NOT BEST FOR AL-  
FALFA.**

The practice of sowing a nurse crop with alfalfa was inaugurated when the nature of the plant was not as well understood as now. It was also somewhat on the theory too that "a half-loaf is better than no bread." It began when there was a good deal of doubt about "getting a stand," and the farmer thought no doubt that a crops of oats or barley would pay for the plowing even if the alfalfa failed. While the practice is continued by many, the prevalent later method is to provide no nurse crop. Few who have abandoned the nurse crop have returned to it. The alfalfa plant does not need protection from the sun, nor is it bettered by dividing any of the soil moisture or fertility with another crop. On the other hand if alfalfa is sowed in the spring, it is important that it obtain an early start in order that its roots can quickly work down into the moisture of the subsoil, against the dry days of July and August. When a nurse crop of any vigor is removed the alfalfa plants are likely to be found weak; spindling and with little root growth; the nurse crop has also taken up some of the soil nitrogen needed by the young alfalfa; or if the nurse crop is heavy and has lodged, there will be left bare spots, where the alfalfa has been smothered out.

Cutting the nurse crop is likely to be attended with no little damage to the tender alfalfa plants by trampling their crowns into the ground, or breaking them off. Practically all the experiment stations favor sowing alone. With few exceptions the second and third years have brought heavier yields where no nurse crop was used. The theory that the nurse crop will prevent the weeds choking the alfalfa is apparently, as a rule, not well founded. In the first place alfalfa should not be sown on foul land, and in the second place proper disking and harrowing, at near intervals for four or six weeks before sowing will disturb or kill far more weeds than can any nurse crop. Besides, the oats or barley sown as a nurse will, when cut leave weeds in good growth, or dormant and ready to spring up as fast or faster than the alfalfa. No nurse crop is ever used with fall sowing. When ground has been properly prepared for the preceding crop, and then properly cared for, and made ready for the alfalfa by the preliminary weed destruction, it will be found advisable to sow alfalfa alone, even in the spring.—From Coburn's "The Book of Alfalfa."

Always mention The Southern  
Planter when writing advertisers.**A. HORN, The Berry Man**  
**Soddy, Tennessee****R. F. D. No. 3****The Largest Berry Grower in the  
South.**500 acres in Strawberries. 50,000,000  
plants for sale. A new plant field  
of 100 acres.**Place Your Order Now for Plants.**

I want every grower to investigate my new "Tennessee Favorite." The very best berry grown for market—size, color, flavor and shipping qualities considered. Even in size throughout season. I picked and sold from one acre 4,456 quarts at a net profit of 11 cents a quart, making a total profit of \$491.16, in the Spring of 1908. For the season of 1909 I shipped 194 crates per acre which net \$2.52 per crate. To vouch for the truth of this statement I refer anyone to M. Fugazzi & Co., Cincinnati, Ohio, who handled these shipments.

In my thirty years' experience I have found nothing quite its equal. Does its best in low, strong land. To introduce and to reach all growers, only \$4.00 per thousand. Try them. Other varieties: Aromas, Klondyke, Lady Thompson.

**Special Prices to Nurserymen.**  
References: The Citizen's National Bank, Chattanooga; Sam. A. Conner, Sheriff of Hamilton County, M. Fugazzi & Co., Cincinnati, Ohio.

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**CELERY** Cabbage Plants  
600,000 Celery and  
ready, \$1.00 per 1,000. 5,000, \$4. All  
varieties. Safe delivery guaranteed. I  
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Established 1899.**ALL THE SAME.**Tutterson. "Did Bronson leave a  
will?"

Smithers. "Yes—that is, he left a  
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will Bronson had for twenty-five  
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Size 30x60 inches, \$1.50 each.

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Saves you one to two dollars each. How many shall we send you? Order to-day. Sent immediately upon receipt of Registered Letter, Express or Money Order.

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(Inc.)

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## Barred Plymouth Rocks.

Successive winners in strongest competition at Richmond and Washington, D. C. When looking around for your birds for the shows or for utility purposes, you should pause and look well at my beautiful young stock, the finest that I have ever raised. My "Ringlets" are unexcelled in size, vigor, beauty and egg production. Write me. I will have birds that will please you, both in quality and price. Satisfaction guaranteed.

In writing for prices, state for what purpose birds are wanted.

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### WHITE WYANDOTTE HENS

at \$1.50 and \$2.

each. All this year's breeders must go to make room for young stock. This is a rare opportunity to get the best for practically nothing. Special price on large orders.

**EVELYN HEIGHTS FARM.,**

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A fine lot of youngsters now for sale. Order early and get first pick. All farm raised and vigorous. Special prices in quantities. Write for prices stating how many wanted.

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White Wyandotte Chickens, White Holland Turkeys, White Muscovy Ducks, stock and eggs in season.

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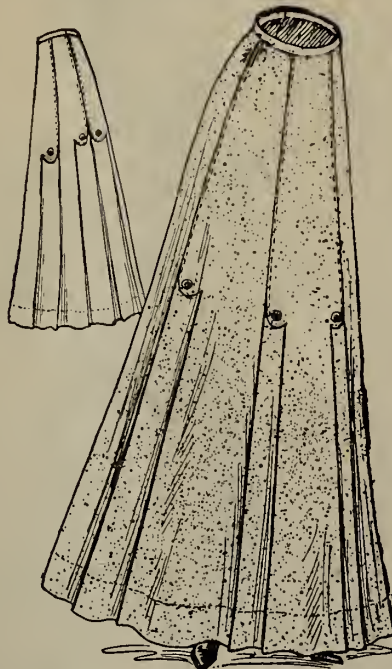
Hickory Bottom Poultry Farm,

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### HINTS BY MAY MANTON.

The skirt that is plain at its upper portion and laid in plaits at the lower is the very latest to have appeared. This one is smart in the extreme, provides fulness enough for grace in walking, yet is narrow and straight in effect, as the plaits are designed to be pressed flat. In the illustration it is made of the hop sacking that will be so much worn during the coming season but it is appropriate for all skirting materials, those of the present as well as those of the future, and it will also be found a most satisfactory model for the entire gown and for the coat suit. The lines are all desirable ones and the skirt can be relied upon to be smart and satisfactory in every way.



6410 Seven Gored Walking Skirt,  
22 to 32 waist.

The skirt is cut in seven gores. There is an extension at the back edge of each gore below the scallops and these extensions form the plaits. The scallops are designed to be under-faced or finished in any way that may be preferred and afford excellent opportunity for the use of the fashionable buttons. The fulness at the back is laid in inverted plaits.

The quantity of material required for the medium size is 6 1-2 yards 27, 43-4 yards 44, or 41-2 yards 52 inches wide: width of skirt at lower edge 41-2 yards.

The pattern 6410 is cut in sizes for a 22, 24, 26, 28, 30 and 32-inch waist measure.

Such a simple, pretty frock as this one never fails to find a welcome. It can be made from washable material or from wool, it can be scalloped and embroidered as in this instance or it can be trimmed in any way that may be preferred. It is graceful and

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Would be pleased to quote you for immediate acceptance attractive prices on Breeders from the following fancy pens:

**W. F. SPANISH, BLACK LANGSHAN, BLK. MINORCAS, R. I. RED, BUFF ORPINGTON, WHITE LEGHORN, S. S. HAMBURG, RED PYLE GAME, BLK. SUMATRA GAME.**

Beautiful young stock for later shipment, better book now.

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For my young stock I will offer some of my choice **WHITE PLYMOUTH ROCK YEAR-OLD HENS** in any quantity to suit at \$15.00 per dozen. Also a few male birds to spare, from \$2 to \$10 each. Order direct from this ad. Eggs, \$1.00 for 15; \$4.00 per 100.

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References. A. A. Harris, Cashier of Chestertown Bank; John Matthews, agent of Adams Express Co. both of Chestertown, Md.

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becoming yet practical and it is altogether charming and attractive. In the illustration linen is scalloped and embroidered with a simple design but such mothers as are thinking ahead for the autumn school days may like to use cashmere, henrietta, light weight serge, or some similar material and the model suits just as well as it does cotton and linen stuffs. It can be made either with three-quarter or long sleeves and it is closed at the centre back above the collar, invisibly beneath the box plait below.



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The dress is made with the panel, which is extended to form the collar at the back and with plaited side and back portions. The fulness is held in position by means of the belt and the yoke is attached to the edge of the dress beneath the panel and collar. The short sleeves are moderately full and gathered into bands and the long ones are plain.

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In 1907 we won CHAMPION RAM at Chicago International, Michigan State and New York State Fairs, and every FIRST PRIZE at Vermont State Fair.

In 1908 we won champion Ram at Indiana and New York State Fairs. This year we have bought at a cost of \$900 the 1st Prize Royal Ram in England. Our rams are better than ever and we have reduced the price 30 per cent. from last year.

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A blue ribbon winner at Va. State Fair, 1908. He is one of the Great Bears of the Berkshire Breed, is not only a splendid individual but has proven himself a wonderful breeder. His pigs are large, even size no "runts" fine length, full of quality with best of Berkshire heads. Anyone in search of a top boar pig to head a good herd, write me. My pigs are out of large prolific sows of best breeding. Prices reasonable and stock must please you.

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Biltmore strain, good individuals, of either sex.

Ten fine Jersey heifers and Plymouth Rock cockerels.

Everything guaranteed as represented or money refunded.

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One 3 years old bay mare mule, thoroughly broken to all farm work.

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One pair of well matched black horse mules, 2 years old, blocky and well shaped. This pair of fine two year olds will be sold at a special bargain if bought at once.

Some fine registered Angus Bull and Heifer calves at farmers' prices.

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We have before us a copy of this book, containing 160 pages with 150 illustrations. It is unusual in its completeness as a practical guide to the cement worker, a helpful, eye-opening advisor to the property owner large or small.

A look through the pages of the book is a revelation of the endless uses and possibilities of cement from a 40c. fence post to a \$4,000 barn, from a small chimney cap to an entire house with foundations, steps, walls, porch, porch posts, tubs, cisterns, etc., all built of cement. The very convenient index shows over 60 different uses about the farm.

The directions for making these various cement articles and buildings are given in plain language that any one can easily understand, and are accompanied by clear-cut drawings that can turn anyone into a practical cement worker at short notice. Numerous photographs of cement work and cement structures in course of erection or completed according to these instructions form a convincing proof of their practical efficiency.

As an illustration of the simplicity of cement work (or concrete work, rather, for cement is used in connection with water, sand and gravel or broken stone) there is shown a Dancing Pavillion made of concrete by a farmer and his hired man, neither of whom had had any experience.

As a demonstration of the economy of concrete work a table shows that concrete fence posts may be made at a cost of 20 to 40 cents each. This is remarkably cheap when you consider that such a post lasts forever, being proof against rust, rot and vermin. The book shows that one barrel of cement (4 bags) will make 14 7-foot posts.

Explicit directions are given as to the proportion in which cement should be mixed for the various purposes with sand, and gravel or broken stone (water being added while working.) Considering that cement proper forms only a small part of the mixture (from 10 to 20 per cent.), its economy is apparent at a glance.

The book is bound to interest farm owners of all kinds. The Dairy Man and Stock Raiser will be particularly attracted by the chapters on Dairy Stables, Silos, Feed and Water Troughs, etc. The horticulturist can feast his eye on the cement root cellars, green houses, flower boxes, etc. The lover of homes will be delighted by the pleasing houses, porches, steps, walks, etc., with which he can beautify his estate. The Poultry Raiser will rivet his attention to the numerous poultry houses shown. If a farmer is fortunate enough to have a brook near his home, the book will show him how to dam the water for power purposes or for raising a lake,

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Imported and Imported in Dam

### 150 HEAD IN THE HERD

To select from, and not a single animal but what is for sale. We won first and junior championship on yearling bull, Eminent 14th, at the National Dairy Show; First on heifer not in milk, under two years; First and second on heifers under six months, and seven other ribbons on the twelve head we exhibited.

Write to-day and get pedigrees, descriptions and prices. Address

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Offers a foundation herd of pure-bred Holsteins, consisting of one Bull and two Heifers, highly bred and elegant individuals. All from Advanced Registry dams

Price, \$250 F. O. B.

Get in line while these "special inducement" offers last.

Orders by wire surest. Satisfaction guaranteed.

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From Registered Stock of Fine Breeding.

Knowle of Cook Farm 5057 at head of herd. Sire 2nd prize boar at Royal Show, Eng., 1907., Dam, 1st prize gilt at same show, 1907.

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Sunshine and Perfection blood. Choice lot of pigs now ready for shipment. Three months pigs, \$6. Choice Gilts and Service Boars, from \$12.50 to \$15.

All stock in fine condition, strong and healthy.

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Large Yorkshires and Poland Chinas. Special low price now on pigs in pairs not akin. Also Hampshire down sheep. All stock registered or eligible.

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Best hog on earth. Fall pigs now coming. Please let us have your orders. Satisfaction guaranteed.

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The grandest saddle and combined Stallion in South. Thirty-three first and champion prizes in harness and under saddle; 7 saddle gaits, 30 High School Tricks. In the Stud at Leedale Farm.

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P 8

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**JUBILEE No. 229,**

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and harvesting and storing his own ice. If you are unfortunate enough to have swampy land, the book will show you how to construct cement drain tile and master the excess of moisture. If your land threatens to slip away, the book will show you how to build retaining walls. If your buildings need repairs, the book will show you how to do it economically and effectively. It practically sits right down at the farmer's table and, like a well versed friend, talks over his problems with him.

Apart from its value as a handy cement manual, its suggestive help is inestimable. The man who keeps this book handy will get from it valuable (and hitherto unthought of) ideas as to how he can solve his property problems, how he can make improvements that are permanent, profitable and cheap.

A highly interesting and novel use of cement is shown in "Curing" decayed trees by filling the cavity with concrete.

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Thoroughbred and Registered Foal of 1909.

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Positively only perfect stock shipped. Average weight, 150 lbs. at 4 mo. O. I. C. Hogs are cholera proof—see our guarantee. Write today for illustrated circular showing some of our famous herd.

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**BILL OF SALE FOR THIS MONTH**—100 White, Brown and Buff Leghorn yearling hens, \$1 each; 25 Rose Comb Brown Leghorn hens, 1 cock, \$25; some breeding pens of Silver Laced, Columbian and Buff Wyandottes, Buff Orpington, R. I. Reds, 10 hens and 1 cock, \$15; one pen each White Rock and Dark Brahmas, 8 hens, 1 cock, \$15; yearling Duroc Registered Boar, first \$20 gets him. Clarence Shenk, Luray, Va.

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**FOR SALE**—S. C. BROWN LEGHORN also R. I. Red Cockerels, Hens, and Pullets from prize-winning strains and great egg-producing families. It pays always to get the best. Evergreen Farms, W. B. Gates, Prop., Rice Depot, Va.

**FOR SALE**—100 PURE-BRED S. C. R. I. Red Cockerels, April hatched. Can furnish any class from utility to prize winners. All cocks at head of yards were shown and won in competition. As layers the hens cannot be beaten. Prices \$1 to \$5. J. A. Berger, Guilford, Md.

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**BUFF PLYMOUTH ROCKS**—EARLY hatched cockerels and pullets for sale, \$1 and up. Breed from Richmond, Greensboro, Bristol, Washington prize-winners. Dave Jardine, Staunton, Va.

**WANTED**—TWENTY-FIVE HUNDRED March and April hatched W. Rock and S. C. B. Leghorn Pullets for breeding. Address Walter P. Laird, Supt., Warm Springs, Va.

**FOR SALE**—ONE PAIR TOULOUSE Geese, \$5; one gander, \$2.50, good markings, good weight. Ingleside Poultry Yards, O. L. Ligon, Sabot, Va.

**R. C. SILVER LACED WYANDOTTES**. My choice breeders for sale to make room for growing stock. Mrs. Fannie Carter, Rice Depot, Va.

**R. C. RHODE ISLAND REDS, APRIL** hatched, \$1.50 pair or lot of 25 for \$15. Mrs. Wm. Birch, New Glasgow, Va.

**S. C. BROWN LEGHORNS AND RHODE** Island Red Cockerels, 75c. and \$1 each. R. F. Payne, Crofton, Va.

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**DORSET BARGAINS**—REGISTERED and grades. Exceptional prices to prompt buyers. H. Armstrong, Box 244, Mt. Jackson, Va.

**FOR SALE**—IMPORTED GERMAN Coach Sallion, 4 years old, 16 hands high, weighs 1,350 lbs., good flat bone, fine style and action, plenty of speed, a perfect eye and a noble disposition. Have both German and American certificates of registration. A bargain for some one interested in breeding good serviceable horses. Address, T. E. Roberts, Chase City, Va.

**WE HAVE FOR SALE 500 CLEAN** straight, grade Merino ewes, 4 to 6 years old at \$6 per head. From these we have produced what we consider a first class flock of youngsters and have no further use for them. Leeds Manor, Markham, Va.

**SEVERAL YOUNG REGISTERED** Aberdeen Angus bulls. Sired by Gold Nugget 26957, who was never beaten in the show ring, at farmers' prices. David I. Jaynes, Massaponax, Va., Member of the Aberdeen Angus Breeders Association.

**PURE-BRED POLAND-CHINAS**—A few choice pigs from May litters, \$8 each, \$15 per pair; a large bred sow, \$25; pigs 8 weeks old, \$5 each. Satisfaction guaranteed. H. L. Hayes Bealeton, Va.

**WANT**—1 TO 3 YEAR OLD JERSEY and Holstein springers, young and cows with calves, good quality only. Give price and particulars. C. F. Hodgman, 219 Arcade Building, Norfolk, Va.

**FOR SALE**—REGISTERED POLLED Herefords, Wilton, Anxiety and Howe strains. Prices moderate. Apply Samuel T. Earle, Jr., 1431 Linden Ave., Baltimore, Md.

**PONIES**—SEVERAL SHETLAND and others for children, well broken. One pair matched roan mares, 5 years, kind; single and double. J. M. Cunningham, Brandy Station, Va.

**FOR SALE**—BERKSHIRE BOARS ready for service. Well formed and of excellent breeding. Evergreen Farms, W. B. Gates, Prop., Rice Depot, Va.

**REGISTERED DUROC-JERSEY SWINE** for sale. Pigs ready for shipment. Expect twelve litters during September. R. W. Watson, Petersburg, Va.

**TO TRADE FINE BROOD MARE FOR** Road Stallion. For particulars address Ellyson Ewell, R. F. D. No. 2., Richmond, Va.

**FOR SALE**—A FEW DUROC MALE Pigs eligible to registry. October delivery. C. M. Shenck, R. No. 2, Sutherland, Va.

**REGISTERED BERKSHIRE SOW** and five pigs, excellent strain, for sale at reasonable price. S. H., care Southern Planter.

**BEST BREEDING OF LARGE YORK-**shires at bargain prices. W. E. Stickley, Strasburg, Va.

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**WANTED**—TO BUY ALL KINDS Wild Birds and Animals, particularly Tame Deer, Wild Turkeys, White Squirrels, Peafowl, Otters, Red Foxes Gray Squirrels, Partridges, Pheasants, Beaver. State price when writing. Dr. Cecil French, Naturalist, Washington, D. C.

**PEDIGREED SCOTCH COLLIE** Females at half price during this month. Pups and grown dogs. Shadybrook Farm, R. F. D. 2. Roanoke, Va.



**DOGS, PET STOCK, ETC. (Continued).**

**WILL EXCHANGE PAIR PUREBRED** English Beagle pups, seven months old, eligible to registry, finest in the county, for White Wyandotte Pullets or year old hens. T. J. Kilmon, Keller, Va.

**FOX, DEER, COON AND OPOSSUM** hounds and pups, \$3.50 to \$15 each. For bargains write me. E. F. Willmouth, Shelbyville, Ky.

**PURE BRED SHEPHERD, COLLIE** pups for sale. Colors black and tan. \$4. J. D. Coghill, Goodloes, Va.

**REAL ESTATE—(Continued).**

**FOR SALE—"THE CEDARS" FARM,** in Buckingham and Fluvanna Counties, Va.; 378 acres; river front of one mile on James and Slate rivers; 70 acres rich bottom land; 100 acres wood, balance in good uplands, suitable for tobacco, all cereals, grass and trucking; 1 1-2 miles to nearest station; two other town stations, 4 miles; newly rebuilt 2-story frame dwelling, slate roof, front porch 52x10 feet, back porch 18x8 feet; eight rooms, besides kitchen, bathroom, toilet, etc., with hot and cold water; cemented cellar; new tenant house, slate roof, 45x12 1-2 feet, with porch smoke, chicken houses and ice house, new barn of corrugated iron, 45x56 feet; new rat proof cornhouse; about 150 fruit trees—apple, peach, pear, apricot, cherry, plum, fig, pecan—grape vines, strawberry and asparagus beds; lawn 219x186 feet; one-year old privet hedge, ornamental and shade trees, vines and flowers; a valuable vein of copper; also talcum deposit; one-fourth of the mineral rights on this and adjacent properties, aggregating about 1,000 acres, with indications for slate and other minerals, included with this farm; deer, wild turkeys, ducks, birds and black bass in season. Address P. O. box 74, Arvon, Va.

**FOR SALE—A VERY FINE FARM** near Ringgold, Va., Pittsylvania county, six miles of Danville, Va., in a fine tobacco section. Soil very suitable for raising cattle. Contains 257 acres, three good dwelling houses, tobacco barns and other out-houses, all in good repair; has plenty of wood; also half interest in a fine Water Power Grist Mill and Saw Mill, and 50 acres of land. This mill has plenty of water, three good dwelling houses and stables. In a good section of country to buy grain. Convenient to the City of Danville, with a big sale in meal and flour. Bargain to quick purchaser. Apply to Fred S. Clark, Ringgold, Va.

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**GRAZING LANDS FOR SHEEP—WE** have for sale 4,000 acres of lumbered mountain lands in this, the healthiest section of the South. These lands lie from 1,500 to 2,000 feet above sea level and from four to ten miles from the Southern Railway, are well sheltered and well watered, yield grass in abundance wherever there is a clearing, and are well adapted to sheep raising. We will either sell them at a low price or lease them to a responsible party experienced in sheep raising for a share of the profits. Address Realty Loan & Guarantee Company, Morganton, N. C.

**TO RENT—A FINE 500-ACRE FARM** in Albemarle County. Excellent land, and first class neighborhood. One mile from two stations on C. & O. R. R. Convenient to schools, telephones, churches, and post offices. Will rent on shares or for money. Owner can furnish two standard bred mares, three milch cows, 75 head of sheep, four brood sows and the usual farm machinery. Desire tenant with enough capital to run the place satisfactorily. Address Jos. W. Everett, Keswick Depot, Va.

**FOR SALE—SUBURBAN FARM OF 70** acres adjoining the town of Morganton, N. C. Fine view of Blue Ridge and Catawba River. New 7-room cottage with city water and telephone connections, greenhouse, extensive hotbeds, barn, chicken-houses, well, etc. If desired, would sell tract of 20 acres with above improvements separately. Address: Riverside Park, Morganton, N. C.

**DAIRY AND POULTRY FARM FOR** sale—farm of about fifty acres located fifty miles from Washington, in Fauquier Co., Va., 1 1/2 miles from station on Southern. Accessible to new creamery. Improvements: seven room house, horse stable, cow barn, poultry house, fenced and well watered. Price \$2,800. O. A. Thomas, Bealeton, Va.

**WANTED—BUYERS FOR FARMS IN** Granville County, North Carolina, suitable for Tobacco, corn, wheat, and general crops. Prices according to location. Terms easy to parties with satisfactory references. Write us to-day for booklet, and information. Granville Real Estate and Trust Company, Oxford, N. C.

**REAL ESTATE WANTED—IF YOU** want to sell or buy a farm, business or income property, write us, giving full particulars and get our free plan of mutual co-operation whereby you deal direct and have no commission to pay. American Investment Association, Minneapolis, Minnesota.

**NICE FARM FOR SALE—ON AC-**count of sickness, 50 acres open, 100 acres in good timber; telephone and school wagon; one mile to railroad and post office; cannery and barrel factory three miles; creamery in Williamsburg. O'Kern, Diascond, Va.

**FOR SALE—MAGNIFICENT EARLY** hatched pullets and cockerels in Barred Rock, White Orpington, White Wyandotte. Nothing but the best. Fine show birds a specialty. Invest now. Miss Clara L. Smith, Landor Poultry Yards, Croxton, Va.

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**20-ACRE HOME, TWO HOURS DRIVE** from Washington; new buildings; soft water, springs, brook, bargain. Correspondence solicited. Might exchange. A. Jeffers, Burke, Va.

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**POSITIONS HELP.**

**WANTED—MARRIED MAN WITH** small family as working manager on country place about 16 miles from Richmond, Va., on Southern Ry. Must understand trucking, poultry, and the care of a small amount of stock. May be able to give employment to wife if desired. Position open October 1st. Apply with references. T. S. Winston, Room 808, Amer. Bank Bldg Box 632, Richmond, Va.

**WANTED BY MARRIED MAN, WHITE** (no children) now employed as working manager, a similar position by Oct. 1. Good reasons for change. References. Understands stock and machinery thoroughly. Address Pilot, care Southern Planter.

**WANTED—A GOOD EXPERIENCED** man with family to take charge of farm of 700 acres. Man must understand practical farming and bringing up of soil. Apply to Dr. W. O. Coffee, Sabot, Va.

**WANTED—A PRACTICAL EXPER-**ienced farmer to work on shares. Fine farm, well stocked, land suitable for all crops. Reference required as to character and experience and ability. Apply to A. E. Dilleuth, Blackstone, Va.

**WANTED—WORKING MANAGER FOR** country place, full knowledge of farming and machinery. Give wages desired, references and full particulars. Address R. B. care Southern Planter.

**WANTED—A WORKING FOREMAN** to run a farm of 100 acres of arable land. Will furnish him with house and firewood and milk. State experience and wages expected. S. G. Miller, Mathews C. H., Va.



**POSITIONS—HELP. (Continued.)**

**WANTED—POSITION AS FARM MAN-**ager, single, thoroughly competent, experienced in Western and Southern farming. Address, "Farmer," Jettersville, Va.

**WANTED—MAN WITH FAMILY FOR** year 1910 as herdsman for herd of 80 cows. Must be capable and well recommended. Write Forest Home Farm, Purcellville, Va.

**WANTED—POSITION AS FOREMAN** and manager on a farm. Can give references as being sober, honest, straight and reliable and with the experience. R., Vashitl, Va.

**WANTED, GOOD ALL-ROUND WHITE** man for farm work, house, etc., furnished. Give age of self and family. Address E. G. Craig, Keswick, Va.

**SEED, PLANTS, Etc.**

**FOR SALE—APPLER RUST PROOF** Winter Oats, grown three years in Eastern Maryland. Yield this year 50 bushels per acre. 80 cents per bushel f. o. b. Cash or certified checks. Bag included. David Wallace, Barclay, Queen Anne Co., Md.

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**FOR SALE—HANCOCK DISC PLOW** either double or single, only plowed about twenty-four acres. As good as new. W. E. Cook, Crewe, Va.

**FOR SALE—ONE HURST FOUR ROW** potato sprayer with orchard attachment, in good order. P. J. Boelte, News Ferry, Va.

**THE BEE INDUSTRY OF VIRGINIA**

The bee industry of Virginia has been very much neglected. Our natural resources are great enough to make this an important phase of Virginia agriculture; but, through neglect, diseases and other causes, few people in the State have made bee keeping profitable. The Virginia Agricultural Experiment Station, in conjunction with the Bureau of Entomology of the United States Department of Agriculture, is making an effort to learn the condition of the bee industry of Virginia and the causes of failure. Various diseases are working quietly to destroy the bees and generally the keeper does not know there is any disease among his bees until the colony is destroyed. It is frequently reported in the State that bee moths are eating the combs. This never happens in strong, healthy colonies. Whenever bee moths are seen, at work it is well to see whether there is not some disease in the combs which is killing the young developing bees. In case this is suspected, a sample of any dead larvae in the comb should be sent at once to the Experiment Station at Blacksburg. Several pamphlets on bee keeping will be sent free on request to the State Agricultural Experiment Station, Blacksburg, Va.

A Neat Binder for your back numbers can be had for 30 cents. Address our Business Department.

**FOR SALE. ONE 20-INCH OHIO FEED** Cutter with 30 feet carrier. Machine in good condition and will sell cheap. Address Box 192, Richmond, Va.

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Lumber, Laths, Shingles, Sash, Blinds, Doors, Frames, Mouldings, Asphalt Roofing, Yards and buildings covering ten acres.

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**HAVEN'T YOU A BUILDING THAT** would suit you better if it was moved, and turned around, raised or lowered or placed differently. We do this anywhere in Eastern Virginia or North Carolina in a workmanlike manner. Furnish estimates on short notice and solicit your inquiries. Carson Moving Machine Co., Carson, Va.

**ON SALE TO QUICK BUYER ON AC-**count of bereavement, an excellent dairy business comprising cows, horses, crops, furniture and implements. Lease to run four years. Near to good city and showing \$50 weekly, easily doubled. Genuine, Apply B. C. R., care Southern Planter

**GROUND LIMESTONE—THOSE WISH-**ing to purchase ground limestone, please write me for prices, etc. State amount wanted. This stone runs from 90 to 99 per cent. carbonate of lime and will be pulverized to flour. Write me your wants. Address, Dr. J. B. Tuttle, Craigsville, Virginia.

**SHEET MUSIC—SHEET MUSIC—\$1.00** worth of Sheet Music for 25 cents. Send us the names of five piano players and 25 cents in stamps and we will mail you four copies of popular sheet music. Southern Music Co., Box 30, Richmond, Va.

**WANTED—SWEET AND BLACK GUM** Poplar, Maple, Sycamore and Birch logs sawed 15 to 30 inches in diameter, 32 to 52 inches long with bark. Manchester Basket Works, Manchester, Va.

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Near Charlottesville, Va.  
Fine Registered

**SHORT HORNS**

Bull and Heifer Calves, Yearlings and young calves from 4 to 6 months old. Pure-bred Barred Plymouth Rock fowls for sale.

R. Warner Wood, Eirdwood, Va.

100 SELECT

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Our thirty brood sows have farrowed and we are now offering about one-half of our crop of pigs to the farmers for breeders. We are offering only the best of each litter, about the best four from each litter, guaranteeing to the purchaser the best and most thrifty pigs; the others we will convert into pork.

The thirty sows, the dams of the pigs offered, are exceptionally fine as individuals and in breeding. They were carefully selected for uniformity and high quality; they are large, growthy sows of the right type.

Our three herd boars are the equal of any, in fact three better boars would be hard to find, their breeding is the BEST.

Our farms contain about 1,000 acres and our hogs have free range over the best blue grass and clover pastures, nothing is kept in small lots or pens. Animals intended for breeders should be confined as little as possible.

The next year or two hogs are going to bring good money. Now is the time to get started. We can sell you any number, male or female and not akin. We guarantee satisfaction or return your money.

We HAVE the largest herd in the East. Buy where you have plenty to select from and make your own selection if possible, but if unable to do so and it is left to us, we will guarantee to please you.

WARREN RICE,

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It is no more expensive to maintain a good bull at the head of your herd than a poor one, and the former is certainly worth many times his cost. Therefore, write for pedigree and price on one of the richly bred bulls which this herd now offers for sale.

Address: W. F. Carter, Jr., Agent. Crozet, Albemarle County, Virginia. W. Fitzhugh Carter, M. D., Owner.

*The breed holds the milk and butter records of the world; the herd embraces some of its best families.*

### ENQUIRERS' COLUMN.

All inquiries must reach us by the 15th of the month previous to the issue, or they cannot be answered until the month following.

#### Sick Hogs.

I would like to ask through your paper, a remedy for hogs. About two months ago, one of my pigs began to pant as if he couldn't get his breath, and kept getting worse until the third day, when he died. A month later, a young sow was taken in the same way. She had great difficulty in breathing for a week, but finally recovered. Four weeks later a shoat was affected in the same way and only lived a day and a half. After dying he bled at the nose. I cut him open, and found his lungs dark green in spots, the cells filled with foam, also his wind-pipe an inch from his lungs filled with foam and blood. His stomach seemed in perfect condition and he ate up to an hour of his death. Can you tell me what the trouble is and the remedy?

P. V. S.

King William Co., Va.

The symptoms would indicate pneumonia, as a result of taking cold. Saltpetre dissolved in the drinking water or given in drachm doses, as a drench is about as useful a remedy as can be given. Keep the animals warm when giving this, and give milk as feed.—Ed.

#### Lettuce Growing.

Will you please tell me something about winter lettuce growing? What time should the plants be set, and how; what is the best kind of soil, and what preparation should the land have?

E. M. PIER.

Campbell, Co., Va.

Big Boston is the variety usually grown. The seed should be sown about the middle of September, on a plant bed. One pound of seed will raise plants enough for an acre. The plants should be ready to set out by the middle of November. A good loam soil not over stiff nor over sandy is best. The soil should be deep and fertile and be heavily manured and fertilized. Cow manure is better than horse manure. Plow the land deeply and well and then apply the ma-

### BIG MILKING, HIGH-GRADE OR REGISTERED

## HOLSTEIN-FRIESIAN COWS

Are what the South needs. We furnish the kind that fill the pail every time they are milked. They are "mortgage lifters." Don't keep unprofitable scrubs. Send for free circular, "Cow Boarders."



We furnish cows that will give from 7 to 10 gals. per day and 5,000 to 6,000 qts. a year.

We recently sold Sweet Briar Institute, Sweet Briar, Va., a car of high-grade Holstein Cows. Go and look at them. They are fairly representative of what we offer.

We are responsible and furnish the highest

Two "Mortgage Lifters"—Milk Records of 12,000 lbs. references. Each a Year.

All mail orders will receive the same attention as if personally selected. Write to-day stating wants.

THE SYRACUSE BREEDERS' ASSOCIATION,

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## THE HOLLINS HERD OF HOLSTEIN-FRIESIANS

A WORKING HERD, WORKING EVERY DAY IN THE YEAR.

Holsteins are the BEST because:—

Holsteins are larger and healthier than other dairy breeds;  
Holsteins produce larger and healthier calves than other dairy breeds;  
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Holsteins produce milk more easily digested than that of other dairy breeds;  
Holsteins are found in more countries, they occupy more territory and they probably produce more milk, cheese and butter than all others Combined.

Registered Bull Calves Out of Heavy Producing Cows for sale.

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### MEADOW FARM DAIRY

PURE  
BRED

## Holstein-Friesians.

A WORKING HERD OF SEVENTY-FIVE  
REGISTERED COWS--ALL FIRST-CLASS

Young Males and Females for Sale.

Address J. P. TAYLOR,  
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If you are feeding hogs for profit, aim to keep them growing every minute of every day, from the time they're "farrowed." This is not an impossibility—on the contrary it's easy to do. It is simply a matter of keeping the hog's digestive apparatus in a normal healthy condition, and appetite keen and sharp, so that the hog will steadily receive and put to use a large food ration. This is "The Dr. Hess Idea" of feeding and from successful experiments along this line has come

# DR HESS STOCK FOOD A TONIC

—an animal tonic which every feeder needs to make his work successful. It contains elements which medical authorities have always recommended as beneficial to the stomach and the digestive function. It regulates the bowels and expels poisonous matter from the system enabling the animal to resist the poisonous germs of disease. Sold on a written guarantee and fed twice a day in small doses.

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Also Manufacturers of Dr. Hess Pan-a-ce-a and Instant Louse Killer. Free from the 1st to the 10th of each month—Dr. Hess (M. D., D. V. S.) will prescribe for your ailing animals. His 98-page Veterinary Book free for the asking. Send 2c stamp and mention this paper.

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Something to make the hens lay better. To help young chicks to mature earlier and old fowls to fat quicker. In no sense a food, but a tonic preparation to put in food. Dr. Hess Poultry Pan-a-ce-a is the present day foundation of all successful poultry culture. It acts directly on the hen's digestive apparatus; quickens appetite; increases assimilation and makes good health and large production second nature to the fowl. It cures Gapes, Cholera, Roup, etc., A penny's worth feeds 30 hens one day. Sold on a written guarantee.

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Except in Canada and Extreme West and South. Send 2c for Dr. Hess 48-page Poultry Book, free.

## INSTANT LOUSE KILLER KILLS LICE

nure and the following fertilizer per acre; 300 pounds of muriate of potash, 700 pounds acid phosphate and 200 pounds dried blood, and then narrow deeply and thoroughly, so as to mix the manure and fertilizer completely with the soil. Lay off the land in beds 12 feet wide with 2 foot alleys between. Upon the beds, low ridges should be made with a hand plow or the hoe. The plants should then be set on the ridges, one foot apart. As soon as the plants are set, they should be covered with plant bed muslin, fastened to stubs about eight inches high on each side of the beds. Work the crop during the winter whenever the ground is dry enough, with a narrow hoe and keep clear of weeds. About March 1st, apply 400 pounds per acre of nitrate of soda. The crop should begin to head in April. A Southern aspect and comparatively level land is best.—Ed.

### Dehorning Cattle.

I noticed an inquiry in one of your issues sometime since, in regard to dehorning cattle, and as I was rather surprised at the answer, I wish to

## CHOICE BERKSHIRE PIGS of the BEST BLOOD and QUALITY

If you want a pair or trio of pigs from the best and most prolific strains of Berkshires, write me. My sows are of the best blood of the breed, being daughters and granddaughters of Premier Longfellow, Baron Duke the 50th, and the noted Huntress.

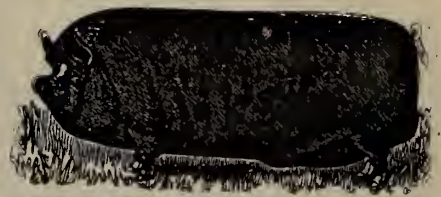
Their litters are by my great herd boars, Hunter of Biltmore 3d, and Earhart's Model Premier.

These boars are a big, fancy type, are of the best prize-winning blood of the world and their pigs are the kind that will make you money.

Let me quote you prices on first-class pigs and ready-for-service boars.

I ship everything subject to your examination and approval and my prices are reasonable. Address,

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Herd-headers and Dams of Herd

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Improve your farm and swell your bank account by stocking with Breeding Ewes. We are in position to sell you good pure-Bred Bucks and Feeding Lambs, also Feeding Steers, stock cattle and yearlings. Now is the time to buy, and in the spring and summer will sell your fat cattle, sheep and lambs at best market prices. We will sell you stock that will make you good money. Write us

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give you my experience. In the last few years I have dehorned several hundred cattle, and I find that the best age is from ten to eighteen months. If you will clip the horns off right smooth and close to the head, there is no danger of them growing out. Cattle at this age will get well much quicker than older cattle. The best time of the year is in November.

J. P. WRIGHT.

Strawberries, Peaches and Grapes to Plant in Southwest Virginia.

Will you kindly advise me a few of the best varieties of strawberries, early and late peaches, and grapes, for red lime stone land. What time in the fall to plant them?

J. ALLEN FLORA.

Roanoke, Va.

Strawberries—Bubach No. 5, Gandy and Tennessee.

Peaches—Early Greensboro, Early Crawford, General Lee, Mountain Rose and St. John.

Peaches, Medium—Chairs Choice, Elberta, Late Crawford, Old Dominion (cling), Stump.

Peaches, Late—Bilyeu.

Grapes, Black—Concord, Moore, Norton.

Grapes, Red—Brighton, Delaware.

Grapes, White—Martha, Niagara.

Plant in November or in the spring early.—Ed.

Kaffir Corn.

Will you kindly tell me how to raise Kaffir Corn, and give the yield per acre compared with field corn. Is not the analysis of Kaffir corn and field corn, practically the same? Is it considered good feed for poultry? How is the grain threshed?

C. W. GARY.

Southampton, Co., Va.

Kaffir corn is grown just as corn is grown and usually succeeds on any land which will produce corn. It is more resistant to drouth than corn and will make a crop in a season when corn would be a failure. For this reason it is grown largely in Kansas and the drouth sections of the West. It will make from 25 to 50 bushels of seed to the acre. The feeding value is practically the same as corn. It is good feed for poultry

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for next 30 days only.

The panic drove hundreds of breeders out of business. The next twelve months will see them tumbling over one another to get back—as the demand and prices advance. I staid in the boat, kept up my herd and advertisements, hence am well equipped for orders. My Berkshires are as fine as the world can produce. Price in easy reach of everyone. Scores of pigs ready for shipment.

THOS. S. WHITE,

Fassifera Stock Farm.

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## JERSEY BULL

Forest Home Farm,  
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## Moore's Brook Berkshire Herd

FOR SALE—HERD BOARS, BRED

Sows; best lot of Spring Pigs we have ever raised; all pigs prize winners or through descendants. Come and see them or send us your mail order. It will receive our best attention.



MOORE'S BROOK SANITARIUM CO., Charlottesville, Va.

## Milton Farm Berkshires

Milton Premier 113579

{ Premier Star II, 80865

{ Ruby's Polly VII, 113,577

{ Premier Star, 70004

{ Ruby's Fancy's Sister, 96241

{ Premier Star, 70004.

{ Ruby's Polly III, 113588

Fall Pigs are now coming in. A few boars about ready for service and some fine gilts at \$15 to \$20 registered and transferred.

JOHN E. MUNCASTER,

Route 5, ROCKVILLE, MD.





## ***Blacklegoids***

FOR PROTECTING CATTLE AGAINST BLACKLEG.

**SIMPLE—SAFE—SURE.**

NO DOSE TO MEASURE.

NO LIQUID TO SPILL

NO STRING TO ROT.

## **KRESO DIP FOR ALL LIVE STOCK**

Kills Lice, Mites and Fleas. Cures Mange, Scab, Ringworm. Disinfects, Cleanses, Purifies.

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**A SAFE ANTHRAX VACCINE**

FOR PROTECTING HORSES, MULES, CATTLE, SHEEP, GOATS AND SWINE AGAINST ANTHRAX.  
WRITE FOR FREE BOOKLETS UPON THESE PRODUCTS.

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# **Dairy Heifers for Sale**

**HIGH GRADE**

**Jerseys, Guernseys and Holsteins**

**Bred to calve this fall**

**Tuberculin tested**

ADDRESS

**CASTALIA STOCK FARM**

**KESWICK, = = Albemarle County, Virginia**





## Ft. Lewis Stock Farm

THE BEST PLACE FOR BLOOD AND REGISTERED  
**BERKSHIRES**

White Leghorn, all breeds of Plymouth Rock, Black Minorca and Rhode Island Red Fowls. Eggs from these pure-blooded birds for sale.

DR. W. L. NOLEN, PROPRIETOR, SALEM, VA.



but is like corn, better fed in mixture with wheat or oats. The grain is threshed by running the heads into a wheat separator and then withdrawing the stalks, or the heads are sometimes cut off the stalks when harvesting the crop and these are then run through the separator.—Ed.

### Seeding Crimson Clover and Improving Land.

I have 15 acres in peas on land just of ordinary fertility. Would produce 15 or 20 bushels of corn to the acre. When I seeded the peas I put on 22 bags of phosphate and on one acre I used 1 ton of lime as an experiment. This acre can be distinguished at a distance or 400 or 500 yards, but the whole bids fair to make a good fallow. I expect to turn the peas in about the last of September and use one ton of raw bone to the acre. What I wish to know is, will it be too late for me to get a stand of German clover. What would you advise me to do. Would you sow from one-half to three-fourths of a bushel of rye in with the clover, so as to make a winter cover for the clover? I haven't much faith in the rye as an improver, only just as a cover to protect the clover. I expect you to advise fallowing the peas sooner, but want to gather my seed from this field. I want to plant corn on this pea field next spring, and want it to bring me from 75 to 100 bushels of corn at the least.

CHARLES L. DYER.

Chesterfield Co., Va.

Whilst it would no doubt be better to sow the crimson clover earlier than the last of September, yet we have often known an excellent stand to be got seeded in October. Whenever sowed late we always advise the seeding of a grain mixture with the crimson clover so that there will be a certainty of some cover on the land during the winter and spring. The late seeded clover is often partially or wholly winter killed, and if there be no grain sowed on the land in such a case, there is no cover crop and fertility is lost. Whilst the grain adds nothing to the fertility except the little humus it supplies, yet it conserves the nitrates left in the soil by the previous crops, which in its absence, would be largely lost. We very much doubt whether it will pay you to apply the bone before seeding the clover. There should be left after the pea crop, plenty of both nitrogen and phosphoric acid on the soil to make the clover and the bone would, in our opinion, be more valua-

## GLENBURN BERKSHIRES

Great sons and daughters of Lord Premier, Premier Longfellow, and Masterpiece, in herd.

We are overstocked and will sell sows and gilts bred or open at just a little above pork prices. Pigs also at cut prices.

We have some nice Jersey Cows and Heifers at bargain prices.

DR. J. D. KIRK,

Roanoke, Va.

## For Sale: Two Well Bred Jersey Bulls, 6 & 12 months old

Two-year-old and Yearling Guernsey Bulls.

Two grade Red Polled Heifers, one with Heifer Calf; other soon due.

## BERKSHIRE AND YORKSHIRE PIGS

All in good condition and ready to ship.

**M. B. Rowe & Co.,** Fredericksburg, Virginia

## HILLCREST FARM BERKSHIRES



Herd's Boars—Master's Compensation No. 94346; Sallie Lee's Last of Biltmore No. 111,687.

We have some extra good pigs, from two to six months old, and the boar pigs are good enough to head any herd.

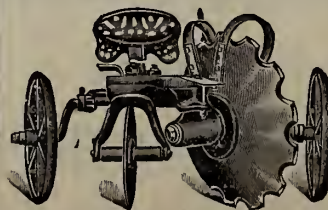
The above pigs are out of daughter and granddaughter of Premier Longfellow, Masterpiece and Lord Premier and such other noted Berkshires.

All stock as represented, or money refunded.

W. R. FENSOM, Richmond, Va.

## CLARK'S REVERSIBLE CUTAWAY SULKY DISK PLOW

The Only PERFECT REVERSIBLE SULKY DISK PLOW MADE.



Plow When Turning to Right.

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**CLARK'S  
CUTAWAY  
TOOLS**

Is controlled at the end of the furrow by a foot trip lever which releases the Turning Disk, so that when the horses are brought in good position to continue plowing it inter-locks itself without any further use of levers or efforts of the driver. Can be used as a right or left hand plow and is a perfect success. Is mounted on carrying wheels and is as light as is consistent with durability. The best results are obtained in plowing fallow land for the Cutaway blades shake out the edge of the furrow so that it isn't necessary to harrow the land after once ploughed with this plow. Send today for FREE Booklet with full information.



# MORVEN PARK

PROPERTY OF WESTMORELAND DAVIS

## Registered Percherons

Five years ago, we sent our representative to France with instructions to secure the best stallion and mares that could be selected. We then imported the French government approved and premium stallion "VIBRAYE" a prize winner himself, and a son of the celebrated "BESIQUE" for six years the winner over all France. The animals selected beside being prize winners are rich in "Brilliant" blood. Our Imported mares work every day, thus demonstrating their suitability for the needs of our farmers.

We have now two year stallions and colts for sale.

## Registered Guernseys

Throughout the North and the West, the Guernsey is the cow, and as our farmers require to increase the butter fat content of their milk, they will find the use of a Guernsey bull upon their herds most satisfactory. Our herd consists largely of animals selected by us upon the Island of Guernsey and is headed by the great bull "France's Jewel VIII" son of "La France VIII" who made 13,000 pounds of milk on grass on the Island of Guernsey. The herd is rich in France, Masher, May Rose and other fashionable strains of Guernsey blood. Our herd is regularly tuberculin tested by the Agricultural Department of the United States. We are still increasing our herd and have only bulls for sale at reasonable prices.

## Large Imported White Yorkshires

These pigs are the bacon pigs of the West and of England. They are hardy and prolific. If your sows are of the lard type and give but a few pigs, a Yorkshire boar will increase the size of the litters and improve the quality of the meat. Our pigs have heavy coats of hair and do not sun scald. After eighteen months of exposure without shade and practically no shelter, we exhibited at the Virginia State Fair a boar which took the Championship of his breed. His skin was in a fine condition. We highly recommend the use of these boars to our farmers.

**WE ARE ALSO BREEDERS OF DORSET HORN SHEEP.**

For further particulars apply to

**LIVE STOCK DEPARTMENT**

**MORVEN PARK, NEAR LEESBURG, LOUDOUN COUNTY, VIRGINIA**



# ROSE DALE HERD ABERDEEN-ANGUS CATTLE



We offer to the farmers and breeders of the East strictly choice Young Registered Bulls from weanlings to serviceable age. They are of the straight, broad-backed, low-down, compact, blocky type. Many of them show ring animals. They represent the blood of Master II., of Meadow Brook; Gay Lord, Jr.; Heather Lad II., Zaire V., Ermine Bearer, Blackbird of Corskie IV., Black Abbott, Abbottsford, Coquette X., Etc.

They are well grown out, in thrifty condition, but not pampered. Come and see them or write us your wants. Prices right. We can please you. Angus cattle are our specialty. We raise no other stock but give them our undivided personal attention.

To avoid inbreeding we offer an exceptionally good herd bull. Write for particulars. Address

**ROSEDALE STOCK FARMS, JEFFERSONTON, VA.**

ble applied when the clover is turned down to feed the corn crop through its growth, and would greatly help you to get the yield of corn you desire. We are glad to see you going so intelligently after the big crop and the improvement of the fertility of your land. Whilst you may not get this all at once, it is bound to come with such farming. The land did not get poor all at once and you cannot get it back to high productiveness all at once. "The mills of the Gods grind slow, but they grind all the time."—Ed.

Winter Oats, Red Clover Seeding—  
Fall Plowing.

1. Is it necessary to sow the Virginia Grey Winter oats every few years in the spring, in order to prevent them running out?

2. Is it a safe practice to sow corn and red clover seed with fall grain in the fall?

3. How do you harmonize keeping a clover crop on the land all winter, with fall and winter fallowing?  
W. E. C.

Nottoway Co., Va.

1. We have never thought it was necessary to sow winter oats in the spring every few years to prevent them running out. We know many old Virginia farmers believe this to be necessary, but have never had any proof that this was so. The Virginia Grey Winter Oat is as much a fixed winter variety as is winter wheat, and you never hear of its being necessary to sow winter wheat in spring to renew its vitality.

2. We never advise the seeding of clover and grass with grain in the fall in the South. The adoption of this practise has been the cause of the loss of thousands of bushels of grass and clover seed. The practise is a good one in England, and in the Northern sections of this country, but is not adapted to the South. The grain matures so much earlier in the South that it so weakens the growth of the clover and grass that when

Someone is going to get a first-class Angus herd header at

## SUNNY HOME FARM

this coming fall. Sire a Jilt, son of the great Erica bull Imported Equestor. Dam sired by the world-famous Gay Blackbird (the sire of the \$3,050 Gay Lad that was champion of America during 1895-96). Second dam, a Nose-gay daughter of the great Beau Bill, champion during 1894 and sire of the dam of Vala, probably the most popular Angus female ever in the American Show Ring.

Imported Equestor's sire was Equestrian, one of the greatest bulls ever at "Ballendalloch."

Don't wait for the other fellow to get this first class bull, the product of the greatest champions of two continents, but write and have him booked for you at once. Write

**A. L. FRENCH, Owner,**

**Byrdville, Va.**

## A RARE CHANCE

To secure a grand Jersey Bull.

"RINORA'S RIOTER" OF ST. LAMBERT, 69,478.

Bred at Bowmont Farms, Va. Sire, Riotor of St. L. Jr., 56580 with many tested daughters. Dam, King's Rinora of St. L. 163512, withwith o cial test of 20 lbs., 2 oz. in seven days when only three years old. Address

EVERGREEN FARMS,

W. B. Gates, Prop.

RICE DEPOT, VA.

## JERSEYS and BERKSHIRES.

Sows bred due to farrow in September. A few fresh cows and some due to fresh in September. Nice lot S. C. B. Leghorn Cockerels and Pullets for sale.

RIVER VIEW FARM, C. M. BASS, Proprietor,

Rice Depot, Virginia.

## HILL TOP STOCK

We have for sale a limited number of Yearling Southdown and Shropshire Bucks, and some good ram Lambs of each of the above breeds.

Have also a few good Berkshire Pigs.

Have some fine Fox Hound Puppies (of pure Walker strain).

We are prepared, too, to furnish a few Yearling Bucks of either Hampshire or Oxford breeds, at as low a price as same class of bucks can be sold anywhere.

H. A. S. HAMILTON & SONS, SHADWELL, VIRGINIA.



# Great Dispersion Sale



Tony 2d 280795.

OF THE  
Famous  
Ingleside Herd

OF



Mapleton 189232.

## HEREFORD CATTLE



Actor 60th 272168.

S. W. ANDERSON,  
Proprietor

BLAKER MILLS,  
W. VIRGINIA



Mapleton 15th 310776.

On Tuesday and Wednesday, September 21st and 22d, 1909, I will sell at public auction in the second story of my barn my entire herd of Hereford cattle—one hundred and forty head, and over one hundred females, a number of which have calves at foot and bred again to such noted sires as the World's Fair Champion, Mapleton, the prize-winning Actor 26th, and a number of heifers safe in calf to sons of these great sires—Mapleton 15th and Actor 60th. I will also sell forty Double Standard Polled Herefords, both bulls and heifers, all ages and in the sale will be cows and heifers bred to our Polled herd bulls, Tony 112173 and Digression 6th and the great Polled show bull, Tony 2d 280795. Thirty bulls, one and two years old, one half of them double Standard Polled; a number of Polled bull and heifer calves will be sold along with their dams.

The greatest opportunity ever offered in the East to buy the best at your own price. A chance of a lifetime. This herd represents the best blood of the breed. Cattle for farmers, cattle for breeders, cattle for ranchmen; herd bulls, show bulls, breeding bulls, together with over one hundred females.

Parties coming by rail will get off at Alderson, W. Va., on the Chesapeake & Ohio R. R., where they will be met with conveyance and taken to the farm. Write for catalogue, arrange to come, make your own selections and your own price. You are cordially invited to be present with us on days of sale and be our guests.



Dorothy Grove 2771.



AUCTIONEERS  
Col. R. E. Edmonson  
Col. Fred Reppert  
Col. C. E. Gardner



Actress 22d 205334.





Farmers, now is the time to order your Chickens, Ducks and Turkeys for next season. I am offering the following special bargains for September: 100 White Rock Cockerels and Pullets, at \$1.50 each; or \$15 dozen; 100 Barred Plymouth Rock Cockerels and pullets, at \$1.50 each; 50 each, Buff Wyandottes and Buff Orpington Pullets and Cockerels, at \$1.25 each; 30 Black Orpington Cockerels and Pullets; also hens, at \$2 each.

None of above later than May hatched. Pekin Ducks \$1.50 to \$2 each. Bronze and White Holland Turkeys at \$5 each for toms, \$4 each for hens.



Pure-bred Berkshires, Poland-China, Chester White, Yorkshire, Tamworth and Duroc Jersey pigs, 2, 3 and 4 months old, single or in pairs and trios, mated for breeding

Choice service boars 150 to 200 lbs. at \$25 each. Some fine bred sows 150 to 200 lbs. \$25 to \$30 each. Do not delay but send your order to-day.

Every farmer who has a dozen or more sheep should have a PURE-BRED RAM, as the ram is more than half the flock. I have choice ram lambs at

\$20 to \$25 each, yearling and older rams as fine as they grow, \$27.50 to \$50 each, according to breed and quality. Ewes bred and open, \$20 to \$25 each. You can have Shropshires, Dorsets, Hampshires or Southdowns as you prefer. Write to-day and order before prices are advanced.



JAMES M. HOBBS, 1521 Mt. Royal Avenue, Baltimore, Maryland.

the grain is cut off in the very hottest part of the year, the sun kills out the young clover and grass almost immediately the shade of the grain is withdrawn. Sow grain alone in the fall and sow clover and grass alone at that season and if the land is in right condition, both will make good crops, but sown together, the chances are ten to one against the clover and grass standing after the grain is cut off.

3. You cannot both have a cover crop on the land in the winter and also have winter plowing on the same land. The importance, however, of sowing a winter cover crop on the land is so great in the South for the conservation of fertility, that it overbalances any and all of the advantages of winter plowing. Late fall and winter plowing is of great importance in the North where the frost locks up the fertility in the land and conserves it and at the same time exercises a wonderful physical and mechanical change in the soil. In the South the frost is usually so slight as to fall to do either of these things, and hence the necessity for the cover crop. As long as you can sow any crop with the probability of its making a cover on the land, it should be sown and usually this may be done with rye as late as November 30th, in middle and Southern Virginia. After that time, plow all through the open weather of the winter and trust to getting some frost to improve the physical and mechanical condition of the soil.

With a proper plowing and preparation of the land for the fall sown crops, the covering with these will conserve and add to the fertility and keep the soil in a good physical and mechanical condition, and result in the growth of a crop which, when turned under, will greatly aid in improving the land. By adopting this method we can, in the South, get two improving crops on the land in one year, or one for the barn and one for the land, and can thus bring up land into a state of fine fertility in

## YOUNG REGISTERED HACKNEYS FOR SALE.

Two Registered Hackney Fillies, sired by General II., color, chestnut, two and three years old, respectively; and one Handsome Registered Hackney Stallion, by Hedrick (no kin to the fillies). These animals are especially breedy, well formed, and a good size for their ages. Address—

T. O. SANDY, BURKEVILLE, VA.

### EXCELLENT

## SHORTHORN HEIFERS AND BULLS.

By the Scotch topped Bull, Royal Lad (advertised by the old reliable breeders, P. S. Lewis & Son, as the best bull ever bred on their farm) by the International winner, Frantic Lad, son of The Lad for Me, champion of America in 1900. Also a few fresh Shorthorn Cows.

Pure Yearling SOUTHDOWN RAMS by Senator, a prize winner in Canada as a lamb and a yearling. He was bred by Hon. George Drummond, the foremost Southdown breeder in America.

R. J. HANCOCK & SON, "Ellerette," Charlottesville, Va

## DUROCS SHORTHORNS SHROPSHIRE

Send for printed list of Durocs and DUROC FACTS. We have boar pigs and shotes, three fine bred sows and two great herd boars, COMMODORE KING and BEAT'S TOP NOTCHER, for sale, at farmer's prices.

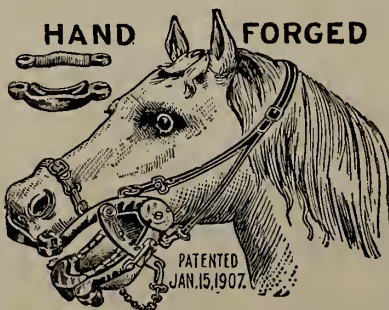
The great Waverly herd of Shorthorns, dual-purpose cows, in calf, heifers and young bulls.

Fifty fine Shropshires, rams, ewes and lambs, from imported prize winners, from \$15 to \$25 each, registered.

LESLIE D. KLINE, Vacluse, Va.

## THE P. & A. MOUTH SPECULUM

### Simplest, Strongest, Safest.



Capable of sustaining immense pressure—two sets of dental plates—interchangeable—introduced like ordinary bit—Can not possibly close of its own accord, or by jerking of the animal's head—Easily taken apart—weighs about four pounds.

Price, Net, \$9.00.

Write for catalogue of Veterinary Instruments, also catalogues of "Easy to Use" Instruments for cattle, for the horse, etc.

POWERS & ANDERSON, Inc., 30 N. 9th St., RICHMOND, Va.

VETERINARY INSTRUMENTS, SURGICAL SUPPLIES, ETC.

half the time the Northern farmer can do. In the South the benefit of the fall cover crop is greater than

the benefit which can be derived from the action of the frost on the land.—Ed.





# Allandale Registered Jerseys FOR SALE;

**LORD BUCKINGHAM 81711.** Sire, Linden Fox 73420, a Grandson of the \$7,500 Flying Fox. Dam, the Great Imported Cow ROSALIE OF GROUVILLE 197630. Born April 5, 1908.

An unusually handsome young bull, now ready for service, combining the acme of fashionable breeding along pre-eminent show and dairy lines with a perfect conformation and fine style. Broad and intelligent forehead, a small muzzle; bright, prominent eyes; a perfect back line superb tail setting; rudimentaries well developed and beautifully placed.

## A FEW SELECT COWS FOR SALE

Rich in the blood of Golden Fern's Lad, King Koffee Imported Fox, Stoke Pogis of Prospect, Tormentor and other noted sires, and with calf to IMPORTED STOCKWELL, the sensational \$11 500 00 bull: EMINENT'S GOLDMONT LAD, the winner of 14 blues and Championships and never beaten in the show ring, and the great young Golden Fern's Lad bull MONA'S HANDSOME FERN.

**WE HAVE THE GOODS, AND WE PROPOSE  
TO MAKE PRICES TO GET THE BUSINESS**

**Allandale Farm, = Fredericksburg, Va.**



### Crimson Clover on the Eastern Shore of Virginia.

I have read many of your contributions to the "Planter," and often note that you remark about the hauling of "Shatters" for the sweet potato crop on the Eastern Shore, and you tell us to use scarlet clover. Now I have a ten acre sweet potato "patch," which, on account of being put out late, will not be dug until October 15th; can I, with profit, sow scarlet clover seed then?

I will want this ground for sweet potatoes next year, and will have to wait until the clover ripens before turning under, and that will make it late, say May 10-15th? If, in your opinion, October 15th was not too late to sow it, and I got a stand, would cutting it by May 1, and let remain on land for plowing down, help matters any? You see that we want to have our land ready for May 1st, so we can begin putting out, or we have to dig late.

Another question; I am now harrowing in peas in late corn, I am going to cut up corn stalks and peas in November or December, so they will decay faster, and will put in round potatoes March 10th. Now you say cover the land during the winter months, can I sow anything on that land after the corn stalks and pea vines are cut in, that will be of a material benefit? I am not after spending money and labor, unless I am convinced that the land will be benefited. Kindly let me have as full reply as possible.

THOS. S. HOPKINS.

Accomac Co., Va.

I think that you can get a stand of crimson clover in Accomac, sown as late as middle of October. I have sown it successfully in North Carolina as late as November 1st, when the previous weather was too dry to sow.

Sow 15 pounds of seed per acre. But get the seed as soon as possible, for it is very scarce and high this season, on account of the failure to make seed in the early wet weather last spring. You can probably get the seed from George Tait & Sons, Norfolk, Va.

Mr. Costen, of Northampton, told me last week that he has tried this clover and that it is all right for sweet potatoes, and certainly the potato growers would do much more for their land by using the clover rather than by laborious raking and hauling shatters. The land badly needs a green winter cover to catch fertility that will otherwise be washed out in the winter rains on unfrozen ground, so that it can be returned to the soil. All over Accomac and Northampton there is too much bare land in winter and the soil loses nearly as much as from the summer crop piling.

I was born at Onancock and am anxious to see Accomac develop her soil as rapidly as possible, and this clover is one of the best things to

## The Hotel CHELSEA

WEST TWENTY-THIRD ST., NEW YORK

*Absolutely Fireproof*

*European Plan*



Room, with use of bath	. . . . .	\$1.50
Room, with private bath	. . . . .	2.00
Suites—Parlor, bedroom and bath	. . . . .	3.50
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The Hotel Chelsea may be reached from the Pennsylvania, Lackawanna, Erie, Reading Baltimore and Ohio, and Jersey Central railroad stations, all at foot of West 23d Street, by cab or electric car direct in five minutes. West 23d Street, New York, ferries land passengers at Hoboken near steamship piers.

## HERCULES Steel Stump Machines

CAST IRON

Strength to the square inch 16,000 pounds

STEEL

STRENGTH TO THE SQUARE INCH 120,000 LBS.



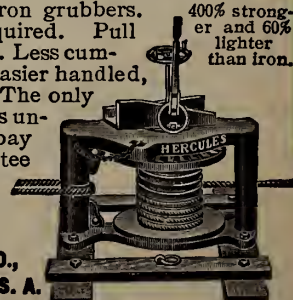
THIS SQUARE REPRESENTS THE POWER OF AN IRON STUMP PULLER

THIS SQUARE REPRESENTS THE POWER OF A STEEL STUMP PULLER

do the work of three iron grubbers. No staking down required. Pull trees as well as stumps. Less cumbersome than iron, easier handled, price almost as low. The only steel grubber and it's unbreakable. We pay freight and guarantee for three years.

Write for catalog and price list.

HERCULES MANUFACTURING CO.,  
Dept. 416 Centerville, Iowa, U. S. A.



400% stronger and 60% lighter than iron.



use. After turning the clover you will need no ammonia in the fertilizer, but simply a good application of acid phosphate and sulphate of potash to balance the nitrogen the clover will give you. Turn the clover under in bloom, say early in May. It would be still better ripe, but that is as you say, rather late. You can sow rye for the round potatoes and have some green to turn with benefit. Sow one and a half bushels of rye per acre.—W. F. Massey.

#### Crimson Clover Seeding—Storing Irish and Sweet Potatoes, Onions, Turnips, Etc.

1. I want to sow this fall, two acres in crimson clover. The land has never had clover on it. Will you please tell me how to prepare the land, when to sow, and how much seed to the acre; also what kind or kinds of fertilizer to use, etc. I will have to buy everything I put on the land, as I haven't any manure. I will appreciate any other information, as I want to get a good stand of clover.

2. How can I put away Irish potatoes so as to keep them 'till April?

3. How can I put away onions so as to keep them until April?

4. How can I put away sweet potatoes so I can keep them 'till April?

5. How can I keep turnips and beets 'till April? Where should turnips and beets be put away?

6. How can I keep cabbage all winter, and which is the best and largest cabbage to keep?

O. L. McFARLAND.

Cleveland County, N. C.

Plow the land deeply and prepare it finely, and if you can get lime, apply one ton to the acre and work in with the harrow and let lay a week. Then apply 250 or 300 pounds of acid phosphate per acre and sow 12 pounds of crimson clover and 3 pecks of wheat, oats and rye, mixed, per acre, and harrow in. This should give you a good cover crop for the winter and a fallow to turn down in April or May, to fit the land for corn.

2, 4 and 5. You will find replies to these queries in our article "Work for the Month," in the Garden section of this issue.

3. Onions should be pulled as soon as matured, shown by the tops dying down, and should be left on the ground to dry out for a day. Then put them on slatted shelves in an airy shed or in an attic with the tops on and where they can be kept cool and dry, and they will keep all winter. The temperature may go down close to freezing without hurting them.

6. The large Flat Dutch or the Savoy is the cabbage to grow for winter keeping. In the South (except in the mountains), cabbage will keep in the ground, heeled over with the heads to the North and soil thrown on to the stalk and base of head lightly. Where the winter is severe, the plants should be pulled up and heads be set on the ground and others be put on these until a pile is formed three or four feet high. This should

## Slaves of the Lamp



osene lamps and the dangerous Kerosene Can forever if you'll just be modern and use Home-made Acetylene Gaslight instead.

\*\*\*

An up-to-date Acetylene Lighting Plant can now be completely installed in the average country home—ready to light up, in two day's time—without injury to ceilings, floors or walls.

Not only light for every room in your house, but light in your out-buildings, barns and barnyard, and, what is more, light that can be turned on by the pull of a chain without the use of matches.

That's modern Acetylene Lighting.

No more lamp-cleaning, filling, chimney-wiping, wick-trimming, breakages, soot nor smell of vile Kerosene.

Instead, Acetylene Light from permanent, handsome, polished brass brackets on the walls and neat brass chandeliers from the ceilings—city-like, elegant, up to date and out of the way.

Can't tip over (like Kerosene Lamps) where there are children—can't do anything but give you brilliant, beautiful, white light, whenever you merely pull a chain on wall bracket or chandelier.

Acetylene Light which does not need mantels, wicks nor chimneys.

Acetylene Light which is so pure, so free from soot and color-fog that you can distinguish pale blue, pale pink or pale yellow under its rays as clearly at night as you could in broad daylight.

Once a month the hired man must clean out and re-fill the generator in the basement with Union Carbide, the material from which Acetylene is made. Takes him 15 minutes to 30 minutes per month to do this if he isn't lazy—30 minutes per month.

"The cost of all this?" you ask. So small, comparatively, that the plant soon pays for itself through what you save on labor, chimneys and wicks and on the difference between the cost of Union Carbide and the Kerosene you are now using.

Shall we give you more precise figures about this "Rural Gaslight"—Acetylene?

Write us today how large your place and where it is located. Then we can mail our free book-

lets and tell you how little it will cost to make this light yourself.

Just Address Union Carbide Sales Co.  
Dept. C. 157 Michigan Ave.  
Chicago, Ill.

HERE are eight lamps—to be cleaned! They are Parlor Lamp, Dining Room Lamp, Upstairs Hall Lamp, Kitchen Bracket Lamp and three Bedroom Lamps; besides all these there is the Lantern, maybe.

Consider for a minute what unpleasant work these lamps call for daily.

Think of all the different processes to go through while the stale Kerosene disgusts, soils and sickens.

And this must be done 365 days in every year, wherever Kerosene lamps are used for lighting.

Get on your thinking cap, madam!

What does all this everlasting daily Lamp Slavery cost?

—In time, comfort, appetite, health and the day's happiness—what does it cost those who live in country homes?

Would any sane person choose to do that kind of work, year in and out, for 2 cents per lamp, if they could avoid it?

Well, 2 cents per lamp means 16 cents per day, exclusive of breakages, new wicks, and waste of Kerosene.

Sixteen cents per day amounts to \$58.40 per year, without cost of Kerosene.

—Then the soot and smell—the burning up of life-giving Oxygen in the air—the giving out of poisonous Carbonic Acid Gas from lamps, to be breathed and rebreathed by children, parents and guests in the homes.

Then the mean yellow light, the clouding chimney, the unevenly charred and smoking wick which will go wrong when you most need good light.

All this because "Mother used Kerosene lamps."

Why don't you stop it?

You may if you will—and save money.

How would you like to roll all these dirty, disagreeable and daily processes into a once-a-month session of fifteen to thirty minutes?

Thirty minutes per month instead of 30 hours per month.

You can save 29 hours lamp-cleaning per month—if you want to.

You can dispense with Ker-





then be covered with straw and soil, be placed on the straw sufficient to keep out the frost.—Ed.

#### Water Supply.

As you've no doubt looked many times into water supply problems, under many conditions, I write to ask if you know of any reason why water could not be hauled in the form of ice in the winter season, while the team is idle, and the water used from the drip of an above ground ice house? As we know but very little of the ice hauled is used, nearly all melting and running into the ground. My ice house is now in the ground, but if I could get a water supply by building above ground, I would willingly change and abandon the old one. Can a house be built to keep as well above ground; and how is it filled?

JOHN CAMM.

By having your ice house on level with ground you could no doubt use the drip from the melting ice as a supply for drinking purposes, but if the ice house was properly built to preserve the ice, that is to prevent it melting as far as possible, the supply would only be small. An ice house can just as well be built on the ground as below it. Indeed, all modern ice houses are so built, as they are so much more convenient to use from and preserve the ice quite as well. An ice house so built is practically a house built within a house, with a space of from 12 to 15 inches between the inner and outer walls packed with sawdust or mineral wool and with a double roof packed in the same way.—Ed.

#### Preparing Land for Wheat.

Tell me how to prepare my land for wheat that I now have in peas, which will be cut off for feed; must I plow the stubble under or disc the wheat in good? I put on about 300 pounds of acid phosphate when I put peas in, must I put on any more, or would some other guano do better?

I have several acres in corn, at the last working of the corn I sowed peas. I used 400 pounds of acid phosphate; I want to put this land in wheat, how shall I prepare it, and shall I use any more guano and what kind.

What kind of wheat would you advise sowing? The little red seems to be everybody's choice in this section and claims to have doubled the yield of any other kind, ranging from 15 to 30 to one; how many bushels should I put to the acre on land that will bring 6 to 8 barrels of corn to the acre, and 15 to 20 barrels to the acre?

Is it right to put wheat in Blue stone water in the old way? Would it do to turn pea vines under for wheat?

P.

Halifax, Co., Va.

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### SAME AS ALL OTHERS CHARGE \$20 TO \$25 FOR

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Write to-day for samples and self-measuring blanks. They cost you nothing.

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## THE "OLD DOMINION" DRILL

If there is one in the reader's neighborhood just ask them what they think about it. If there is not one in your neighborhood, write us for farmers' testimonials.

We claim to offer the best all round wheat drill made. No improvement which we have not.

Eight Disc Drill with Grass Seed and Fertilizer Attachments, \$60.00.

ASHTON STARKE, Richmond, Va.

With Fertilizer Hopper and Grass Seed Attachment



STEEL FRAME. A Spring Set gun with the Drill. You can ride if you wish to.

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By writing when in need of any description of

### Machinery, Boilers, Engines, Tanks, Cars,

Rail Beams, Channels, Plates, Angles, 1 threaded Pipe sizes (1 to 6 inches.) All sizes iron pipe and shells for road draining, etc. Boxes, Shafting, Pulleys, Hangers, Cable, Belting, and thousands of other useful articles in the Largest Stock in the South of used

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will find full advice as to preparing land for wheat seeding.

If your land was well prepared for the peas, by deep plowing and cultivation, and that in corn was also well prepared before the corn was planted and has been kept well cultivated during the growth of the corn, we should in both cases, prepare only with the disc harrow and roller and in both cases would use one ton of lime to the acre, applied when working commenced, and then apply just before seeding, 250 or 300 pounds of bone meal per acre. We would sow the variety, which gives the best results in the locality for the full crop, testing a new variety on an acre or two as an experiment. We have a good report on Leaps Prolific, from Charlotte County, Va., this morning, 30 bushels to the acre. Use Formalin instead of blue stone for preventing smut. See page 731, July issue. Don't turn the pea vines under. cut them in with the disc.—Ed.

#### Corn Firing—Crops on Old Ditch.

Why does corn fire (turn yellow), planted after cotton and what will prevent it?

Why do crops grow better where an old ditch has been filled up.

WALTON O'NEAL.

If land is deeply plowed and properly prepared by repeated working before the corn is planted, so that it will hold the moisture and is made rich by the use of plenty of manure and fertilizer, the corn will not "fire." It fires because it needs moisture and food.

The crop flourishes on the old ditch site because the existence of the ditch caused the growth of plenty of vegetable matter, which has become incorporated with the soil and enriched it, and the soil is kept moist by this humus and yet is sufficiently drained to prevent it becoming water logged.—Ed.

#### Hog Pasture.

I want to make a hog pasture of about one-half acre lots each. What should I sow in each. The date to sow, and the kind to keep something ready every month. I find that 95 per cent. here are no farmers. I have tried for the past two years to get some to subscribe for the Southern Planter and the Practical Farmer. They take very little interest in anything of that kind. Mr. J. W. Gay says that you had some little experience here once. I have not farmed any for a number of years, and find that I am out of date some, but I hope, with the teachings of the Southern Planter and Practical Farmer, to make a success of farming. I have taken both for a number of years, but decided to stop the Practical Farmer when you left it and went to the Southern Planter, so renewed



### Paint Talks No. 5—Advantages of Fall Painting

The fall of the year offers several advantages as a painting time. First, and most important, surfaces are almost sure to be dry; there is no frost or inner moisture to work out after the paint is applied. There are no flies or gnats about to stick in the paint and mar the finished surface; there is less dust. Paint applied in the fall means protection against the penetrating winter storms; it means less likelihood of finding rotted joints and opened fissures in the spring.

Pure White Lead and Linseed Oil (tinted as desired) give a reliable winter coat to a building—an armor against the hardest attacks of the weather. White Lead and Linseed Oil paint does not crack open and scale off. It stays on until gradually worn off—leaving an excellent surface for repainting.

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An office in each of the following cities:

New York Boston Buffalo Cincinnati Chicago Cleveland  
St. Louis (John T. Lewis & Bros. Company, Philadelphia)  
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We have prepared a little package of things bearing on the subject of painting which we call House-owners' Painting Outfit No. 14. It includes:

- 1—Book of color schemes (state whether you wish interior or exterior schemes).
- 2—Specifications for all kinds of painting.
- 3—Instrument for detecting adulteration in paint material, with directions for using it.

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Absolutely in first class order. Never used except for exhibition purposes in our salesrooms. They are new. The very finest products of our factory. To be sold at a big discount to make room for new goods.

State your wishes. The list includes buggies, runabouts, surries, delivery wagons, carts, stanhopes, phaetons, pony carts, etc.

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When corresponding with our advertisers always mention Southern Planter.



my subscription for three years, to get your writings.

G.

Brunswick Co., N. C.

The size of the lots will, of course, depend on the number of hogs you keep. I would arrange for four lots of good soil. Of course, it would be better to have started in the spring to keep up a succession, but you can start now. Sow one lot with Dwarf Essex Rape, two more in crimson clover and the fourth in hairy vetch early in September or sow the second lot in cow-horn turnips or rutabagas, though the rutabagas sown that late will not attain much size, but the cow-horn is pretty hardy. Then, when the rape is well grown in late fall, turn the hogs on it, and then on the turnips. But this winter you will have to feed till you can get the full rotation established. In spring turn on the crimson clover, and at the same time, sow an early cow pea on the lot that was in rape, some such pea as the New Era, and the turnip lot sow to Whippoorwill peas. When the lot of crimson clover is eaten, sow that lot in black peas, and when the last lot of vetch is eaten, plant that lot in corn and turn on the early peas. Follow these with crimson clover and turn on the Whippoorwill and then on the Black, and finish on the corn that followed the vetch. By watching chances, you can contrive to keep up a succession of crop, for the above is merely suggestive and the crops may vary. Some plant Jerusalem Artichokes for the hogs to root in winter, but my experience with these would lead me to avoid them as a troublesome weed.

W. F. MASSEY.

#### Buckwheat.

I have sowed about two and a half acres of buckwheat and would like to know the most practicable way to save the grain, as to cutting and threshing, when to cut, etc., expect will have to thrash by hand.

Orange Co., Va. W. A. C.

The way to save the grain is to cut with either a reaper or a cradle and tie in sheaves and set up in shocks like a grain crop to cure and thresh either with a separator or by hand. Some cure like a hay crop, but this way wastes the grain, which shatters badly.—Ed.

#### Silo.

I want to build a small silo for about six cows that will feed for five months. Could I dig it and cement the walls cheaper than building one? Please inform me how large it would have to be and if the bottom would have to be cemented also. How many acres of corn, about four barrels to acre, will fill it? How much cement will it take, and what per cent. sand? I would not like to dig any deeper than necessary. I had rather dig it larger if just as good. I thought as I increased my cows I

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RICHMOND, VA.

could build one over this, as I saw in your last issue. Please get this in your next issue as I want to dig in September.

How thick would the cement have to be? A FARMER.

Prince Edward Co., Va.

A silo to feed six cows from five



to six months should hold twenty tons of silage and the corn to fill this would require from three to four acres of land, where the corn only makes twenty bushels to the acre. On richer land it could be grown on from one to two acres. Such a silo should be nine feet in diameter and twenty feet deep. You will find it much cheaper to build such an one of lumber than to dig a pit to hold it, and it will be much more convenient to feed from. A silo requires to have all the depth you can give it in order to compress the silage solid and drive out the air, so that no waste shall occur in feeding it out. A large surface left exposed at each feeding wastes the silage, as it spoils quickly on exposure. Send to the Director of the Experiment Station, Blacksburg, Virginia, for a copy of the Bulletin on Silos, which they have just issued. It gives full instructions for building all kinds of silos and the cost.—Ed.

#### Fertilizing Value of Cotton Seed.

Will you please answer through your columns the actual cash value of fertilizer contained in one ton of crushed cotton seed, and is the meal worth more than the whole seed crushed for fertilizer?

A. P. CUTCHIN.

Southampton Co., Va.

A ton of cotton seed contains 62 pounds of nitrogen, 24 pounds of phosphoric acid and 22 pounds of potash.

A ton of cotton seed meal contains 134 pounds of nitrogen, 50 pounds of phosphoric acid and 16 pounds of potash.

The actual value of the plant food in the ton of cotton seed based on the values used in fixing the price of the commercial fertilizers is \$11.70. The actual value of the plant food in the cotton seed meal based on the same way is \$23.70.

The meal is more valuable pound for pound than the seed as the oil in the seed is of no value as a fertilizer, but rather a detriment.—Ed.

#### Feeding Beef Cattle.

Please tell me through your query column if you think I could purchase cattle on Richmond market in the fall that are too thin for beef and ship them out about one hundred miles and make them hold their own through the winter and re-sell them next fall in good shape off grass, and do it profitably. C. L. RUSSELL.

You can no doubt buy the cattle on the Richmond market or through the brokers, whose advertisement you will find in The Planter, and if you have plenty of good roughage, fodder or silage and pea vine hay or other good hay and a little corn make them not only hold their own, but gain something during the winter, but whether you have grass good enough to make them gain sufficient during the next summer to pay as-



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**A** MATITE roofs need no painting. The owner need never look at them; they take care of themselves. They are "no-trouble" roofs. They present to the weather a *real mineral surface* against which storm and wind and snow are absolutely powerless. This surface does not require constant painting like the smooth surfaced or so-called "rubber" roofings. The mineral surface is far better than paint.

Of course before Amatite came, the "smooth surfaced" roofings were the best kind to buy. Now that Amatite has been invented and thoroughly tested by years of use, painting a roof is wasteful and unnecessary. The cost of painting a "rubber" roofing from year to year will soon cost more than the roof itself. That is why everybody who knows about roofing is buying Amatite nowadays. *It needs no painting.*

Amatite is easy to lay. Anyone can do the work. Large headed nails and liquid cement come free with every roll.

We shall take pleasure in sending you a sample of Amatite with our compliments upon request.

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Alcoholism, Morphine and other drug addictions cured in from four to six weeks. 28 years successful experience.

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GREENSBORO, N. C.



suming the price of beef to be no higher than it is now next fall is a question. They do this kind of feeding profitably on rich blue grass pastures of Southwest Virginia, but

we doubt whether your grass one hundred miles from Richmond is good enough to do it. Here it is usually found the most profitable to carry cattle improving slowly through the ear-



ly winter and then to finish them on grain for the June and July market when beef almost always sells here at the best price of the year. We know one or two farmers who have good pastures in this middle section of the State who feed a few cattle every summer on them which they have carried through the winter on a slowly improving ration and do this profitably, but they are the exception.—Ed.

#### Bee Keeping.

Mr. Miller, of Beach, Virginia, a practical bee keeper, writes us in reference to our reply on page 819 of the August issue as to getting bees to drink from vessels put in their yards. He says that he sets a tub or tubs in a sheltered and sunny place in the bee yard and fills these nearly to the top with water, to which he adds a quart of salt, and then he places on the water pieces of cork for the bees to light upon. He prefers to use salt instead of sugar in the water, as it does not induce the bees to rob each other and they take kindly to salt and water.—Ed.

#### Alfalfa.

I am sending you to-day under separate cover a sample of alfalfa that I sowed on the 15th of April and would like for you to give me your advice in regard to it. After sowing it on the 15th of April it came up finely all over the field; then we had a lot of rain and that caused the weeds to grow fast. As soon as it got high enough I ran the mower over it and have continuously kept running the mower over it to keep the weeds down. The alfalfa scarcely grows at all. I would like to know what is the trouble, and what I should do with it. F. J. BELCH.  
Prince George Co., Va.

The alfalfa sent is a strongly rooted sample, but, of course, short from the continued mowing. The weeds are evidently the difficulty in the way of a successful growth. They are robbing the land of the plant food and moisture which should go to the support of the alfalfa. As you have kept them cut off and thus prevented the seeding of another crop to bother the alfalfa next year it may be possible to so feed the alfalfa now as to get it into sufficiently vigorous growth this fall to insure its keeping ahead of the lessened number of weeds next year. We would apply a top dressing of 150 pounds of bone meal, 150 pounds of acid phosphate and 50 pounds of muriate of potash per acre, broadcast, and then run over the alfalfa with the disc harrow with the discs set straight and thus cut this top dressing into the soil. This should start it into vigorous growth and we would leave this growth uncut over the winter, if it does not get over six or eight inches high. If it does, we would clip it again with the mower in September, but

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**FULLY PROTECTS YOU**

—LOTS of manufacturers are keen to tell you what their goods are made of. They give you a beautiful word picture of a marvelous and mysterious "gum" that only they can produce. Others tell you of the real "rubber" that they use—and so on.

Regarding Congo Roofing, we have only two statements to make:

*First*—We believe it is the *best* roofing made.

*Second*—Because we believe that, we give a *genuine Surety Bond* with every roll, which guarantees three-*ply* Congo for 10 years.

These bond are issued by the *National Surety Co.*, and they are as good as government bond.

No other roofing manufacturer *dares* give such a guarantee. You take no chances when you buy Congo.

There is no "gum" in it to make it sticky; there is no rubber in it to get brittle. It is made of the best roofing materials that it is possible for us to purchase under the best manufacturing conditions. Because it is made right, it gives such satisfactory service that we are not afraid to issue a **GUARANTEE BOND** to back up every statement we make. Ask any other manufacturer for a **REAL BOND** and see him squirm.

Booklet and samples of Congo free on request.

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Successor to Buchanan-Foster Co.,  
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## After All, It's Steam and Steam Only

Nothing can take its place. It's cheap and you are sure you've got power when you want it. All the power you need for all purposes. Steam, too—it comes handy in the dairy and elsewhere. You can run a whole string of machines with a

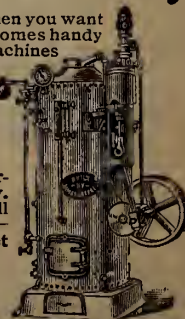


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The Farmer's Power

The old reliable, something you can understand. No delicate, complicated machinery. Buy a Leffel steam engine just once—you'll never need another. All styles and sizes—engines to move where the work is, etc. Let us send you free book to give facts.

James Leffel & Company  
Box 238.      Springfield, Ohio



leave it five or six inches high for protection of the roots during the winter.—Ed.

#### Injury to Wheat.

You will find enclosed stubble of

what that has been or is infested with some kind of pest. What is it? And as this field will go in wheat this year, will it injure it?

Augusta Co., Va.      C. C. WINE.



The pest affecting the wheat is the wheat joint worm. It will be far better not to sow wheat on the same land on which this wheat was grown for a year or two.—Ed.

#### Plants for Name.

Please name the enclosed plant and state its value.

CRITTENDEN.

Wood Muhlenberg. It is of no value.—Ed.

Please name the enclosed plant and its value.

C. N. FARRAR.

Black Betsy, W. Va.

Wild rye. When young, this has some value as grazing.—Ed.

What is the name of the enclosed plant?

D. J. BOWDEN.

Corn cockle. An introduced weed of no value.—Ed.

#### Worms in Horses—Milking Up to Calving.

1. What is good for worms in a horse? I have a mare very wormy and nothing seems to do her any good.

2. Is it injurious to cow or calf to milk cow until calving? I have one that gives milk up to calving and milk seems to be all right.

3. I have a heifer which every time after drinking water coughs some several times.

#### A FAITHFUL SUBSCRIBER.

Prince George Co., Va.

1. For the long round worms, give twice daily for three or four days a drench composed of turpentine one ounce and linseed oil two or three ounces, and follow the fourth day with a physic of Barbadoes aloes one ounce. Then follow with a tonic of one-half ounce of Peruvian bark, gentian and ginger twice a day in the feed. If pin worms are troubling the horse, injections into the bowels through the rectum of one-half pound of tobacco to a gallon of water followed by a physic will remove these.

2. Whilst it is not a desirable practice to milk a cow right up to the period of calving, as it always prevents a cow making as good a return during the next milking period, yet sometimes it cannot be avoided as the milk will continue to flow right up to calving. A cow should have a period of rest between each calving, and usually this can be secured by adopting the method of milking the cow only once a day for a week and then missing a day altogether for a few days and thus gradually dry her.

3. The coughing is not indicative of any sickness. It is probably only spasmodic arising from the taking of the cold water hurriedly.—Ed.

Tell the advertiser where you saw his advertisement.

## What a Gallon of Gasoline Will Do for You

A gallon of gasoline will run one of the efficient 2-horse-power I. H. C. gasoline engines for fully 5 hours.

That is, you will have full 2-horse power to turn your machines all that time.

It will save you and your family all the hard work of turning the cream separator.

It will pump water and grind feed for all your stock.

It will saw your wood, shell your corn, turn your grindstone.

It will do all these things and many more for you the same day.

And for 5 hours' steady work it will cost you the price of one gallon of gasoline.

Is not that getting your hard work done at a pretty cheap rate?

You will have plenty of other jobs for your

## I. H. C. Gasoline Engine

There is something for it to do all the time. If it is not working it is not costing you anything. When the engine stops, all expense stops. But it is ready to start up again at the same work or any other work at any moment.

There are larger I. H. C. engines that consume more fuel and do more work—you have your choice of a number of styles and many sizes.

Vertical 2, 3 and 25-horse power.

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Gasoline tractors 12, 15 and 20-horse power.

Famous air-cooled 1 and 2-horse power.

Famous skidded engines 2, 3, 4, 6 and 8-horse power.

Also a complete line of Famous mounting engines from 4 to 20-horse power, and sawing, spraying and pumping outfits and jacks.

If you will look into the matter rightly, and learn to appreciate how much work an I. H. C. engine will do for you and how economically it will do it, you will inevitably come to the conclusion that you must have one of some kind.

The International local agent will be glad to supply you with catalogues and all particulars, or write us for further information.

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## THE LITTLE SAMPSON ENGINE and BOILER.

\$250.

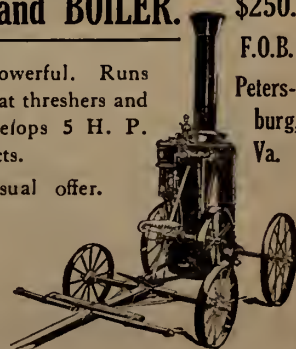
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Petersburg, Va.

The best engine made—simple efficient and powerful. Runs any kind of farm machinery—just the thing for wheat threshers and peanut pickers. Mechanically perfect, and develops 5 H. P. (Guaranteed.) Every part guaranteed against defects.

Write for full information about this unusual offer.  
Agents Wanted.

STRATTON & BRAGG CO.,  
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## BRIEF LETTERS.

Springfield Centre, N. Y.,  
August 24, 1909.

Editor Southern Planter:

Since writing you a few days ago I have to report good sales of sheep as follows:

To B. T. Wilson, Lebanon, Va., two year ram by Astley's Choice, \$40. Samuel Sloan, Garrisons, N. Y., one year ram by Astley's Choice, \$90. Wilber E. Norrish, Flushing, Mich., three year ram, \$100. Bishop Bros., San Ramon, Cal., two ewes, Wardwell breeding, \$120. Charles Cleveland, Fairview, Oregon, ram lamb by Lead-the-Way, \$75. Col. C. F. Carter, Seven Mile Ford, Va., yearling ram by Governor, \$100; ewe lamb by Governor, \$40; yearling ewe by Governor, \$75; imported buttar ewe—champion Toronto, 1908; second New York, 1908; first Highland Show, Scotland, 1908, \$130; imported ewe—second five State Fairs, 1908—\$125; and twenty field ewes from two to five years old, \$600. Col. Carter has traded with me for several years and has about the best flock of Registered Shropshires in Virginia and his farm is in the Western part of the State, a blue grass country that produces good export cattle as well as sheep. His wool sold at thirty-five cents this year and he has a good demand for all the rams he can raise, and he should, as he is a careful buyer and only wants the best. He will show at the leading Virginia Fairs including the State Fair at Richmond and I miss my guess if he doesn't go home with the greater part of the first prizes. Geo. Evans, who has been employed by me as assistant shepherd, has charge of his flock and will show them for Col. Carter. Yours truly,

HENRY L. WARDWELL.

P. S.—Dan Taylor starts to-morrow with twenty-seven of the best sheep ever shown from this farm. Will go to the Ohio Indiana, and New York State Fairs and later will throw down the gauntlet in the International Arena for the great English Challenge Cup.

Editor Southern Planter:

The price at which good hogs are now selling at the stock yards—81-2 cents per pound, live weight—ought to be an inducement to breeders to introduce new blood into their herd.

I have just imported a new herd-header, for though my herd is one of the best, I have to have new blood. Not even the remotest approach to in-breeding "for mine," thank you.

A good boar pig can be had for only a few dollars; in fact, so cheap that a profit can almost be made out of him as meat if altered in a year or so.

G. D. BUDDECKE.

Overbrook Farm.

Henry L. Wardwell, President of American Shropshire Registry Associ-

## Four Moving Parts

That's all there are to the McVicker's valve action. That's why the McVicker is the simplest engine—the easiest to understand and run.

There are 499 other makes of engines, yet each has 12 and more moving parts to its valve action. And that's where most gasoline engine trouble occurs.

You have but to compare the McVicker with one of these and you have compared it with all, for all are practically the same—our engine, only, is different. You can decide in this way which is the best engine made.

We invite comparison, for we know of no better way to sell you one of our engines.

The McVicker is made in the largest and costliest gas engine factory in the United States. Nearly 3,000 were sold last year.

Thousands of farmers who never used engines before have bought ours. Also thousands who have used others. The McVicker appeals to the latter most, for they have had experience. They know.

The McVicker is the simplest engine in the world. Our marvelous patents do away with all cams, gears, ratchets, tumbling rods and other such mystifying "jimm-cracks."

All others must employ them, for they can't run without them.

Our engine is three times the best because it is three times the simplest. Yet it costs no more than the complex.

In fact, it is cheapest by far because its simplicity saves on fuel, oil and repairs.

Don't buy an engine till you know all about the McVicker. We have a great many features to tell you about in our catalog—all of which bear on this astounding simplicity.

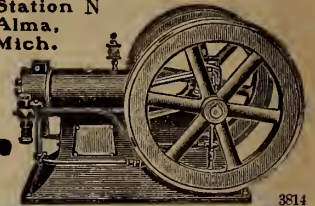
We make all types—from 2 to 30 horse-power—mounted in all ways for all uses. Also traction engines.

We send free plans for a model farm power-house when you write for the catalog. Do it today—a postal—now—before you forget it.

ALMA MFG. CO.,

Station N

Alma,  
Mich.



3814

## The McVicker

## Don't Go to the Spring or Well Have the Water come to You

For over twenty years we have been installing successfully, complete water supply systems, and they are performing their good work to-day.

With our force of experienced workmen, we are better prepared to supply your needs in this direction than any concern south of New York.

We make a specialty of supplying Country Homes with pure, fresh water, and at a moderate cost.

We are not tied down to any system, but are prepared to install the outfit which is best adapted to your particular needs. We are largest house in the South, dealing in water supply outfits, Pumps, Windmills, Gasoline Engines, Rams, Pressure Tanks, Cypress Tanks and Towers.

Catalogue and prices on any of the above will be sent on request.

## Sydnor Pump & Well Co., Inc.

Department "B," Richmond, Virginia.

## The Light Running PENNSYLVANIA Disc and Hoe—All Sizes

The original and only perfect Low Down Drill, by hanging solid steel angle frame below axle. Positive force feed, new style Detachable Fertilizer Feeds, easy to clean, large hoppers. 4 ft. wheels, 3 inch tread. All operating parts in the rear.



Why not buy the lightest, simplest, most convenient and best working drill while you are at it? 40 page catalog of drills, corn planters and other farm tools. 68 page catalog of engines, boilers, saw mills, threshers, either or both mailed free, on request.

A. B. FARQUHAR CO., Ltd.  
Box 902, York, Pa.

TELL THE ADVERTISER WHERE YOU SAW HIS ADVERTISEMENT.



ation, sends us the following interesting correspondence:

College Hill, Shrewsbury, England.

August 13, 1909.

Henry L. Wardwell, Pres.,

American Shropshire Reg. Assn.

Dear Sir:—At a meeting of the Price List Committee of the Shropshire Sheep Breeders' Association, held at Shrewsbury on the tenth instant, we have pleasure in informing you that it was decided to offer the following prize to the "Chicago International Exposition, 1909," viz.:

A silver challenge cup, presented by the English Shropshire Sheep Breeders' Association (per Alfred Mansell & Co., College Hill, Shrewsbury, England), for the best Shropshire flock consisting of one ram, any age; two ewes, any age; one ram lamb and two ewe lambs. Competition to be limited to residents of United States of America and Canada.

As time is short we will be glad if you will kindly make this offer as widely known as possible amongst the breeders in your district.

With thanks in advance,

Yours faithfully,

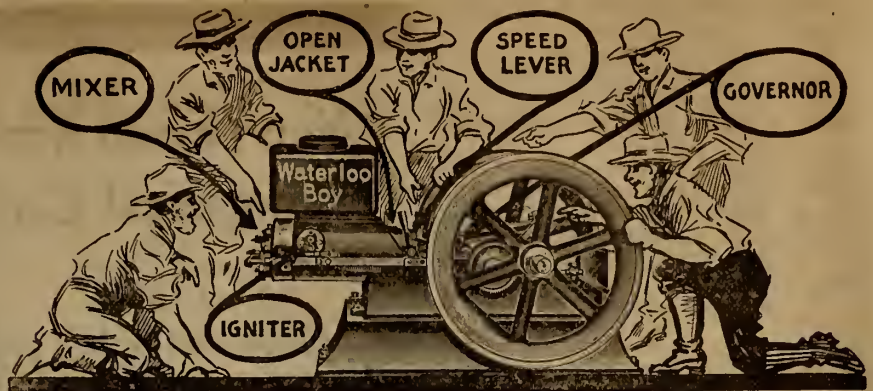
ALFRED MANSELL & CO.

Springfield Centre, N. Y.

August 24, 1909.

Messrs. Alfred Mansell & Co.,

Dear Sirs:—Yours of 13th instant at hand. As President of the American Shropshire Reg. Association, I wish to thank you for the challenge cup to be offered by the Shropshire Sheep Breeders' Association of England. It is indeed a kindly act and not only I, as President of the Association, but I am sure all the buyers and breeders of Shropshire sheep in America will appreciate the true Shropshire spirit of their English cousins. And I am sure they will wish that Mr. Mansell and the other donors could be present at the International and see, may I call it, the Royal battle that I am sure it will stir up. I, for



17 YEARS  
ON THE  
MARKET

**The Waterloo Boy has  
all the Good Points that  
go into any Gasoline Engine**

5 YEAR  
GUARANTEE

and it doesn't take the up-to-date farmer long to discover them and their value to him. It is the number of practical features embodied in an engine that determines the degree of satisfaction it will give to its owner. All gasoline engines have some good points, or there would be no sale for them and they would soon be taken off the market. Some engines have more good points than others, that's why some engines are better than others.

## Waterloo Boy Gasoline Engines

have all the good points that go into any gasoline engine, besides many exclusive, patented features that increase their efficiency and durability; make them marvels of simplicity and wonderfully economical engines to operate. That's why we say the Waterloo Boy is the best engine for farm use.

You can buy a Waterloo Boy for less money than you will be asked for engines containing half of the good points we build into our engines. Besides we will send a Waterloo Boy to any responsible farmer and let him try it for thirty days on his farm doing whatever work he has to do. We will pay the freight both ways and return his money if after a month's use he cannot pick out the good points for himself—if he can't see that it is the one and only engine that will give him complete satisfaction.

Now, when you buy a gasoline engine you had better be sure that the engine you get was made by a concern that makes gasoline engines and nothing else. Our efforts are all directed toward making and keeping the Waterloo Boy the best engine in the world. We have no other interests—no side lines.

Don't you want to try a Waterloo Boy? Don't you want to see how much labor and time it will save you? Remember we are offering you a free trial for 30 days. Better write us today for our catalogue and free trial offer.

Waterloo Gasoline Engine Co., 205 W. Third Ave., Waterloo, Iowa.

Horace L. Smith, Gen. Agent,  
24 Bollingbrook Street, Petersburg, Va.

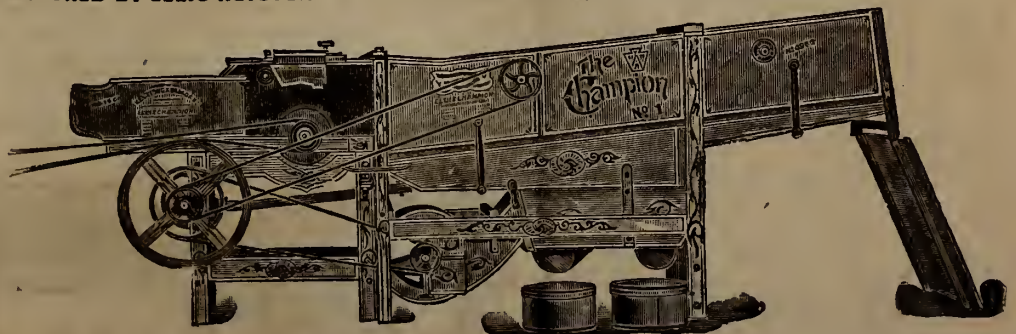
YEARLY  
CAPACITY  
3000 ENGINES

30  
DAYS  
FREE  
TRIAL

## Ellis Champion Grain and Peanut Thresher,

MANUFACTURED BY ELLIS KEYSTONE AGRICULTURAL WORKS, POTTSTOWN, PA.

**Grain and  
Peanut  
Threshers  
and  
Cleaners.**



FOUR SIZES, NOS. 1, 2, 3, and 4 FOR EITHER STEAM, LEVER OR TREAD POWER.

All of which are guaranteed to give entire satisfaction. Our THRESHERS and CLEANERS have been thoroughly tested throughout the United States, and pronounced by the growers of GRAIN and PEANUTS as the most complete and satisfactory Threshers of the period. No grower of the above can afford to be without one.

For Catalog and any other information desired write to

**GEORGE C. BURGESS, General Southern Agent, Box 182, Petersburg, Va.**



one, will make it the fight of my life, but may the best sheep win.

Yours very sincerely,  
HENRY L. WARDWELL.

#### THE VIRGINIA BERKSHIRE ASSOCIATION.

The annual meeting of this Association was held in Charlottesville, on August the 12th. Dr. E. W. Magruder, the President, presided and W. R. Fenson, Secretary and Treasurer, recorded.

There was quite a large attendance of Berkshire breeders, and a great many matters of interest were discussed. Among the more important ones was that of showing hogs out of their class. For example, some breeders are unscrupulous enough to enter nine or ten months' old hogs in a six months' old class. Such action was condemned. Another matter which met with the disapproval of the Association was that of over fitting hogs for the show. Many breeders positively will not get their breeding stock over fat, thereby endangering their breeding qualities. We think they are entirely correct in their view of this matter.

A resolution inviting the Berkshire Congress to hold their Annual Meeting in Richmond, at the State Fair next year, was unanimously adopted and heartily seconded by the Richmond Chamber of Commerce and the Virginia State Fair Association.

Several new members were enlisted and the Association was reported in a healthy condition financially. Dr. D. M. Trice read a paper entitled "The Brood Sow," which is published here-with:

#### THE BROOD SOW, HER SELECTION, CARE AND MANAGEMENT.

Address of Dr. D. M. Trice, before Virginia Berkshire Association.

It is needless to say to the Berkshire Association that in order to have the best, she must be a Berkshire.

First. To produce the type desired, comes the mating of a proper sire and dam. Have done this and farrowed your litter, the same should be carefully gone over and selection made of the best specimens; having due regard to an animal with good head, good, short strong legs, and standing on good, strong feet, well marked, and last, but by no means least, good length of body.

Other things being equal, I always select a pig with not less than twelve teats, and preferably more.

Having made your selection, these pigs should never be allowed to stop growing, and along with their feed, which should be more for growth than fat, they should have plenty of exercise on pasturage of clover, grasses, rape, peas, sorghum, etc.

Having grown your young gilts properly, when should they be bred? Opinions differ greatly as to this. Personally, I rather prefer letting them

## You Should Know This Reliable, Economical Car For All Service

Call and See It  
Demonstrated by the  
International Agent  
In Your Own Town



You are not interested in the highly luxurious cars costing many thousands of dollars that are built for paved streets and fine roads.

You want the car that will go anywhere at any time.

## The International Auto Buggy

is designed to meet country conditions. It is built to travel alike over good roads, average roads and poor roads. You go up and down steep hills without danger of being stuck in deep roads and with a guarantee of getting safely to your journey's end.

It is a car that any member of the family old enough to drive a horse can quickly learn to operate. No car, no matter how high-priced, has a more perfect control.

It is the car that has come to take the place of the carriage and runabout on the farm.

You must appreciate its advantages: Always ready. No bother about hitching up. No need to keep an extra driving team. No need to take a horse from farm work to make an urgent trip to town. No worry to horses when the roads are bad or the trip a long one.

You go quickly and in comfort in the Auto Buggy. Speed as you like, two to twenty miles an hour. The seven gallons of gasoline which the tank holds will last through a trip of 75 miles.

See the International local agent. He will demonstrate this car and supply you with catalogues giving all particulars.

INTERNATIONAL HARVESTER COMPANY OF AMERICA, CHICAGO, U.S.A.

(Incorporated)

## The 31 Year Old SUCCESS SPREADER Roller Bearing

Free From Cog Gears—Direct Chain Drive—Light Draft—Choice of Every-body Who Really Knows Manure Spreaders.

Why experiment? The Success is in use at nearly all Agricultural Colleges and U. S. Experimental Farms. It makes you sure of right work and right working. Parts simple—everything direct—free from breakage—long lived. A generation of experience in it—it has been the leader from the first. Distinguished features made exclusive through patents.

Equipped With Either Steel or Wooden Wheels



Write  
For  
FREE  
Catalog

These Roller Bearings are as  
Good As a Horse

KEMP & BURPEE MANUFACTURING CO., SYRACUSE, N. Y.



get a year old before breeding, as I believe you will get a rather larger sow and stronger, better pigs by so doing. However, a well grown gilt can be bred at 8 months old, without materially checking her growth. I have now in my herd, two sows that had their first litters 16 and 18 days before they were a year old, and I expect to show them in the Junior yearling class this fall, weighing 450 pounds. If so bred, however, very large litters should not be expected, and I most earnestly advise not breeding them for a second litter this first year, but let them be two years old when they farrow their second litters. Having decided when you will breed them and what to, the next point is the method of breeding, and I most strongly advise that this be done with a properly constructed breeding crate.

Having effected the service, the date of same should be carefully recorded and the sow preferably kept quiet to herself for a day or two. I do not think it makes any material difference whether the sow is fat at the time of service or not, although I prefer keeping my sows always in fairly good flesh. Be that as it may, however, I do think it is of the utmost importance that she be fed liberally after service and all during the period of gestation, and brought to farrow in the very best possible condition, and I do not care now fat she is, provided that fat has not been produced with corn or other heating foods, and that she has had plenty of exercise.

My experience is that the pigs from a sow fat at farrowing time, will grow off better, and the sow come through the period of lactation in much better shape than if the sow had been thin. The period of gestation with a sow is from 112 to 114 days, more often the former. About two weeks before this time expires, the sow should be put to herself, or at least where she can sleep to herself, and be fed cooling foods.

Just prior to farrow, and this can be told by the white milk in the udder, she should be put in a compartment 7x8 feet, with fenders all around to prevent the pigs being mashed. Some competent person should remain with the sow, and as the pigs are farrowed, put them into a box until the sow is through farrowing, when they should be placed with her, and she should not be disturbed for 24 hours. It goes without saying that in order to do this, the sow must be gentle, and let me say right here, that I do not believe that anyone can make a success of thoroughbred hogs unless they are gentle enough to handle them this way.

At the end of twenty-four hours, the sow should be given a pail of water with a very small quantity of bran stirred into it. She should be fed lightly for at least a week, in order to get the flow of milk well established, then she should be grad-

# The Coming Universal Use of DE LAVAL CREAM SEPARATORS

The same economical considerations which have already brought about the practically universal use of creamery and factory sizes of DE LAVAL Cream Separators are absolutely certain to accomplish the same result in the use of farm and dairy sizes of such machines within the next five years. This is no mere advertising claim but the simple statement of a conclusion based on the logic of facts as positive as to outcome as the solution of a mathematical problem.

The same considerations of greater capacity; closer separation, particularly under hard conditions; better quality of cream and butter; more economical operation, and greater durability are bound to ultimately accomplish the same result in the use of small as of large sizes of cream separators.

But naturally it requires longer and is vastly more of an undertaking to educate the 2,500,000 present and prospective American users of farm sizes of separators as to the importance of separator differences than the 12,000 users of creamery separators. Naturally it is more difficult to make a user appreciate a difference of \$50.-a year in results than a difference of \$1,500.-, even though the difference of \$50.- may relatively mean more to the user than the difference of \$1,500.

Again, the users of factory or creamery sizes of separators have so much better sources of information. The use of the separator is a business with them. The results are known from day to day and year to year, and what one user accomplishes is readily comparable with the results of another. On the other hand, the great majority of users of farm and dairy sizes of separators know little of separators and cannot easily determine whether their results are as good as they should be or might be better under other circumstances. But the problem is bound to finally work out in the same way.

The DE LAVAL factory separator was invented 31 years ago and commenced to come into creamery use 28 years ago. Within a few years the original patents began to expire. 15 years ago there were a dozen makes of power cream separators on the market. To-day the use of DE LAVAL factory machines exceeds 98 per cent. and is almost literally universal. It has been so for five years. No effort is longer made to sell any other make of power separator.

The DE LAVAL hand separator was invented 23 years ago and commenced to come into farm use about 20 years ago. As the earlier patents expired there were more than 30 makes of such machines on the market five years ago. To-day there are less than a dozen and not more than five which have a sale worth counting at all. Each year the number decreases and their sales become fewer and more difficult.

What is true in America in this way is true in even greater degree elsewhere throughout the world. In many countries the sale of DE LAVAL machines is now almost universal. Dollars-and-cents differences in product mean more there than to American farmers. The sale of cheap "mail order" separators has not been attempted elsewhere, and would-be competing manufacturers and dealers have never been so unscrupulous in making the unjustified "claims" that so many American buyers have accepted as facts.

It makes an AVERAGE DIFFERENCE OF FIFTY DOLLARS A YEAR whether the farm user of a separator uses the DE LAVAL or some other kind. It will make that difference this year and go on making it until a DE LAVAL is used. A DE LAVAL catalogue helps to explain this and is to be had for the asking, as well as an Improved DE LAVAL machine for practical demonstration of it to any intending separator buyer.

## THE DE LAVAL SEPARATOR CO.

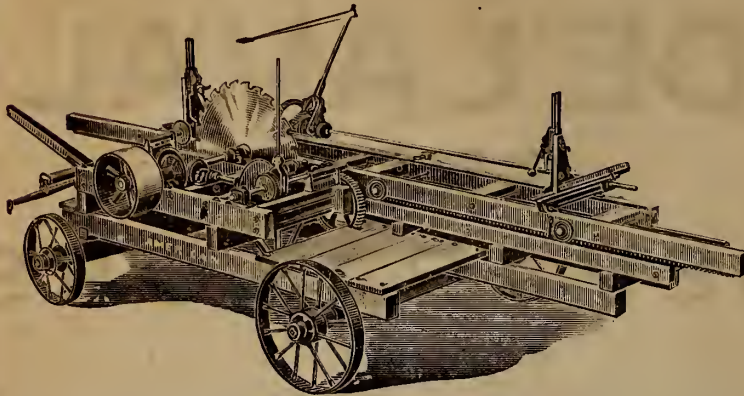
48 E. Madison St.,  
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## Is Timber Scarce? Then take An American Portable Saw Mill



### TO THE TIMBER

#### MOUNTED ON SUBSTANTIAL TRUCK With Heavy Steel Wheels

Carriage, 16 ft. long. Feed Rack, 22 ft. long. Track, 40 ft. long. 3 sections. Mandrel, 23-16 in. diameter. Takes saws up to 52 in. diameter. Two Head-blocks opening 32 inches. Variable Friction Feed. Ideal Ratchet Set Works, with Quick Receder. Total weight, 4,000 lbs.

For small settings, there is no better or more convenient Saw Mill made. It is in every respect the same as our Standard No. 1 Mill, fully described in our handsome catalogue which shows our full line of Saw Mill and other Woodworking Machinery. Ask for it.

## AMERICAN SAW MILL MACHINERY COMPANY

137 HOPE STREET, HACKETTSTOWN, NEW JERSEY

usually brought to full feed and fed liberally all during lactation.

When the pigs are three weeks old, a place should be provided that the sows do not have access to, and in this place a thin swill and shelled corn should always be kept and the pigs will soon find it and it will help their growth very materially besides, which, when the time comes for weaning them, they will be eating well, and the change will not be so sudden. The pigs should be weaned at from eight to ten weeks old, taking off the largest, strongest pigs first, and thus let the sow dry up gradually, and there will be no risk of spoiling her udder.

### THE GASOLINE ENGINE A GREAT FARM HELP.

A good many farmers have the idea that the modern gasoline engine is something for the factory and the shop, and that it has no place on the farm.

It is a mistaken idea. These very farmers would be surprised if they would stop to think of their own work and see how many places and in how many ways a reliable power would be serviceable to them. The fact is that the gasoline engine, ready, powerful, easily moved, easy to operate and economical, is emphatically the farmer's power.

The International Harvester Co. of America is advertising from time to time a line of these engines in this paper. We are persuaded that readers who ignore this advertisement, thinking that the gasoline engine is not for them, are not living up to their privileges.

With all our expensive machines and high priced land and scarcity of labor, our farming must be more intensive than formerly. We must pro-

## HOMESEEKERS

### SUNNY FLORIDA

#### FLORIDA WANTS HOMESSEEKERS AND HAS GREAT INDUCEMENTS TO OFFER.

In the Land of Manatee (west coast) you can grow bigger crops at less expense than elsewhere. Fruits and vegetables grow like magic in the rich soil. A ten acre farm can be bought very reasonably, and will net more than a hundred acres in any Northern State. Fruit Crops net \$500 to \$2,500 per acre. Vegetables \$1,000.

Write for our booklet, written by a western man, containing full information and homeseeker's rates.

J. W. WHITE, Gen'l Industrial Agent,  
Seaboard Air Line, NORFOLK, VA.

## JOHN F. JERMAN HEADQUARTERS FOR VIRGINIA PROPERTY

Main Office, Fairfax, Va.; Branch Office, Vienna and 1316 I St., N. W., Wash., D. C. If you want to buy a grain, dairy, fruit, truck, poultry or blue grass farm, city or village property, it will pay you to send for 80-page catalog. It is full of bargains. It contains all kinds of business propositions. It will pay you to buy a farm near the capitol, where you have good markets, and the benefit of steam and electric R. R. service.

My catalog is free to you. I am always ready to show property, and try to help my clients make a good investment.

My Motto is "Honesty and Fair Dealings."

## Farms in Northern Virginia

DAIRY, GRAIN, STOCK, POULTRY, FRUIT.

Near Washington and Baltimore, and in easy reach of Philadelphia and New York.

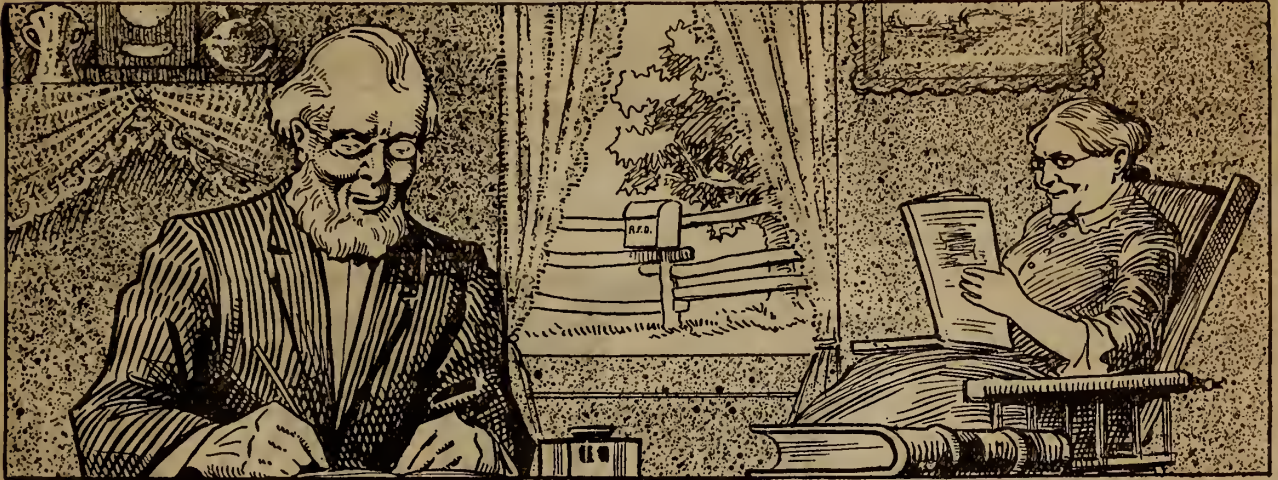
Unlimited markets and unsurpassed shipping facilities.

Reasonable in price. Near good live towns, schools and churches. Write us

CLAUDE G. STEPHENSON,

(Successor to Stephenson & Rainey, Herndon, Va.)





## The Mails Bring This Bank to Your Home

Let Uncle Sam's mail carriers make your deposits for you. The mails are safe; they are quick; they are daily and mighty convenient. Just try Banking by Mail.

### The Times Have Changed

A few years ago, the only people to enjoy the advantages of an account with a strong, interest-paying bank, were those living at or very near the bank building.

But the daily mails—the rural free delivery routes—and the fast trains, together with such a service as is rendered its patrons by The Planters National Bank, have made it easy for all to enjoy perfect banking facilities by mail.

So, to-day, progressive farmers, merchants, teachers, mill men and men and women on salary are doing their banking by mail.

### Strongest National Bank

The Planters National Bank is the strongest national bank south of Washington, and is the bank that made banking by mail so popular. Besides offering every facility—every advantage—and every courtesy to its patrons, it offers greater protection and Three Per Cent. interest on savings accounts.

### Make Your Money Safe

Money in the home is never safe. There is always many ways in which it is liable to be lost.

A fire—a misplacement—a robbery, and the savings of a lifetime are swept away. This deplorable thing happens every day, right here in Virginia.

And where money is kept in the home, there is danger of robbery and murder. It will ever be so.

This strong national bank removes all risk—all danger—and makes your money as safe as your farm.

### Make Your Money Work

Idle money pays no interest. Money that pays no interest does you no immediate good.

The Planters National Bank (Savings Department) pays **Three Per Cent. Compound Interest** from the day you make your deposit.

Thus besides making your money safe, this bank pays for the keeping of it. You cannot afford to let your money remain idle.

We have issued a handsome little booklet—"How to Bank by Mail." Write for a free copy. Write NOW.

# Planters National Bank

Cor. 12th and Main Streets, Richmond, Va.

Capital, \$300,000

Surplus and Undivided Profits, \$1,175,000.00



duce more. We must get the most out of our machines. We must be less at the mercy of hand labor.

The I. H. C. line of gasoline engines are handy powers available alike for big and little duties. Think for a moment of a reliable power that you can take anywhere for any kind of work and have it in operation the moment you get there. Think of having all the power you want just as long as you want it and then shutting it off and stopping all the expense instantly. The cost is always low in proportion to the work done. It's a power you can operate yourself. It will save you labor and make you money in a score of ways. You will find it will soon repay its cost and you will have the engine for many more years of duty.

The International local agents have catalogues giving particulars of these farm labor savers. If you have not already done so, you had better call and get one of these books and study it, and see how much real service such a machine will be to you.

#### THE GREENBRIER WHITE SULPHUR IN 1831.

(Written by the late Mrs. Clifford Cabell. Sent by Mrs. Mary W. Early, Lynchburg, Va.)

The season of which I propose to record my recollections was before the introduction of railroad travel, and the Greenbrier White Sulphur was approached only by stage coaches, private carriages, two wheeled gigs, or cavaliers on horseback. Then not infrequently might be seen the real oldtime gentleman, habited in shorts, knee buckles, and ruffled shirt, with his hair tied in a queue, whilst behind him followed a body servant in his master's cast off clothes, and bearing a large portmanteau in front of him.

Until the year 1824 the stage coaches in Virginia were like lumbering wagons, without springs, glass windows or decent cushions, the passengers stepping on the wheels and clambering in at the front by the driver's seat, but in 1826 this condition was improved. Alexander Patterson, a very enterprising man of that day, introduced a better and more comfortable style of stage coach, painted bright yellow and with glass windows and side doors on which were painted the pictures of various Revolutionary heroes. I remember in particular that of Mad Anthony Wayne. These coaches were considered the height of elegance and convenience and a most rapid and luxurious mode of travel. About the year 1831 the stage contract was taken by "Extra Billy Smith," a man well known in the political world, he having been at one time Governor of the State. Your correspondent still has a scrap of newspaper printed in 1831 in which Mr. Smith informs the public that the route of travel conducted by himself is most rapid, that he has caused to be moved from the north-

## Here's Something New From Kalamazoo



You can save enough real money in getting a Kalamazoo, to buy most of your fuel—pay your taxes, buy a dress or suit of clothes or materially increase your bank balance. You get the best made—the most economical—the most satisfactory stove or range to be had anywhere at any price. With an actual cash saving of from \$5 to \$40 on your purchase. Hundreds of thousands of satisfied users have told us this is true.

We make it easy for any responsible person to own a Kalamazoo. We are the manufacturers. You get lowest factory prices, 360-days' approval test, and our convenient terms. Take your choice—

## Cash or Credit

Write for Catalog No. 400 and special terms. It gives you all the necessary information about buying and using a good stove or range. Compare our prices and quality with others, prove for yourself what you save in buying a Kalamazoo for cash or on time. Freight prepaid. Safe delivery guaranteed.

**Kalamazoo Stove Co., Mfrs.**  
Kalamazoo, Mich.



This Oven Thermometer saves fuel and makes baking easy.

**"A Kalamazoo Direct to You"**  
TRADE MARK REGISTERED



## REVERSIBLE DISC PLOWS

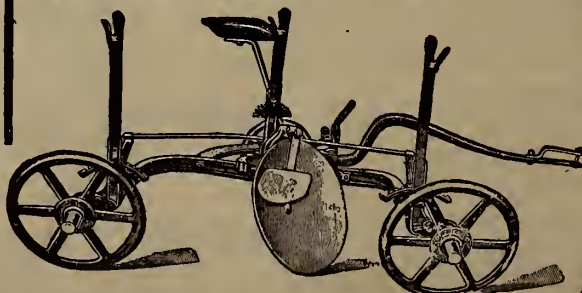
For Two or Three Horses

### Do Their Work "A Comin' and a Goin'"

The Plows that do the best work anywhere and everywhere—hillside or level land—hard ground or soft ground—sticky ground or trashy ground—are the

### CHATTANOOGA REVERSIBLE DISC PLOWS

Chattanooga Plows are the only entirely successful Reversible Disc Plows—simple in design—few in parts—sturdy in construction—as durable as skilled workmanship and the finest materials can make them—guaranteed for twelve months against any breakage caused by defects in material or workmanship. Chattanooga Reversible Plows turn corners, either right or left, pulverize the soil thoroughly, cover weeds, leave a clean furrow, and save time, labor, money and horse flesh. Write today for free postpaid catalog which tells the whole story.



**CHATTANOOGA PLOW CO.**  
413 CARTER ST.,  
Chattanooga, Tenn.



### Economical, Reliable Running Water Service

A constant supply wherever you want it. Automatic in action—no expense for power or repairs. It's easy with a

### RIFE HYDRAULIC RAM

Large and small rams for Country Places, Irrigation, Supply Tanks, Town Plants, etc. For every foot water drops to ram it is raised 30 feet. 7,000 in use.

WRITE FOR FREE PLANS AND ESTIMATES

**RIFE ENGINE CO., 2113 TRINITY BLDG., NEW YORK**

ern waters the steamboat "Champion" on account of its great speed, so that on reaching Baltimore the stage coach passengers would meet with no

delay making connection at the close of the transit from the "Champion."

At this time nothing could have been more pleasant than stage coach



# It Pays in Comfort, Cash and Health to Wear Ruthstein's STEEL SHOES!

Worn With Wonderful Satisfaction by Workers Everywhere!



**FREE** Write for Book  
"The Sole of  
Steel", or order a pair of  
Steel Shoes on blank below

Steel Shoes are as waterproof as rubber boots, and keep the feet warm and perfectly dry, regardless of rain, snow, slush or mud—no matter how cold the weather. They defy cold and wet, protecting the feet even from dampness and chill.

**Good Bye to Corns and Bunions!  
No More Sore, Aching Feet!**

You will not suffer from corns, bunions, callouses and blistered, aching feet if you wear steel shoes. They are shaped to fit the feet and need no "breaking in." Easy on—easy off. No warping, no twisting, no curled up soles. The rigid Steel Shoes force the upper to keep their shape. They rest the feet by affording support exactly where it is needed.

**HOW THESE WONDERFUL SHOES  
ARE MADE.**

The soles of Steel Shoes and an inch above the soles, are stamped out of a special light, thin, rust-resisting steel. One piece of seamless steel from toe to heel! As a further protection from wear and a means of giving a firm foothold, the bottoms are studded with adjustable steel rivets. The "Immortality" of the Sole!

The adjustable rivets add the finishing touch of perfection. Practically all the wear comes on these steel rivets. When steel rivets wear down, you can instantly replace them with new rivets. And the rivets at the tip of the toe and ball of the foot are the only ones that wear. Steel Shoes never go to the repair shop, for there's nothing to wear but the rivets. The cost is only 30 cents for 50 extra steel rivets. No other repairs are ever needed.

The uppers are made of the very best quality of pliable waterproof leather, and firmly riveted to the sole. There is greater strength and longer service and more foot comfort in steel shoes than in any other working shoes in existence. It's in the steel and the pliable leather, and the way they are put together.

**Secret of Steel Shoe Elasticity.**

Steel Shoes have thick, springy Hair Cushion Insoles, which are easily slip-

STEEL SHOES ARE SETTING THE SWIFTEST PACE IN SALES OF ANY SHOES IN EXISTENCE. THEY ARE SO STRONG AND DURABLE, SO EASY AND COMFORTABLE, THAT FARMERS AND ALL CLASSES OF WORKERS ARE SIMPLY ASTONISHED. ONE PAIR WILL OUTWEAR FROM THREE TO SIX PAIRS OF THE BEST LEATHER-SOLED SHOES YOU CAN BUY.

THERE'S THE UTMOST LIMIT OF WEAR IN EVERY PAIR OF STEEL SHOES—AND COMFORT AS LONG AS YOU WEAR THEM. THEY ARE LIGHTER THAN ALL-LEATHER WORK SHOES. WITH THEIR THICK AND CLUMSY SOLES. THEY NEED NO REPAIRS. THEY ARE ABSOLUTELY WATERPROOF AND WILL KEEP YOUR FEET WARM, DRY AND COMFORTABLE IN THE COLDEST WEATHER. IN MUD, SNOW OR SLUSH UP TO YOUR SHOE-TOPS. DO YOU WONDER THAT MANY THOUSANDS OF WORKERS WILL WEAR NO OTHER KIND OF WORK SHOE?

**STEEL SHOES GIVE ABSOLUTE PROTECTION AGAINST  
Colds, Rheumatism,  
Sore Throat, Stiffness,  
Discomfort**

ped out for cleaning and airing. They absorb perspiration and foot odors—absorb the jar and shock when you walk on hard or stony ground.

**Save Doctors' Bills.**

Steel Shoes pay for themselves over and over again in the saving of medicine and doctors' bills. They prevent sickness.

**Save \$5 to \$10 in Shoe Money.**

As one pair of Steel Shoes will outlast three to six pairs of leather-soled shoes, or at least three pairs of rubber boots, it is easy to see that the saving in shoe bill is great. At least \$5 to \$10 a year! A man who wears Steel Shoes doesn't have to own three different styles of working shoes.

**Save Repair Bills.**

Steel Shoes need no extensive repairs—no "half-soleing," no new heels, no patches.

The thin steel soles are turned up an inch high all around—absolutely no cracks or seams to hold moisture or mud. You can instantly replace the adjustable steel rivets when partly worn. The expense of keeping leather-soled shoes repaired is often nearly as great as the original cost of the shoes.

**Made in Sizes 5 to 12—6-inch, 9-inch, 12-inch and 16-inch High Styles.**

Steel Shoes are made with tops of different heights, suitable for every purpose, from general field work to ditch digging.

Steel Shoes, 6 inches high, \$2.50 a pair, are better than the best all-leather \$3.50 shoes.

Steel Shoes, 6 inches high, with extra grade of leather, \$3.00 a pair, excel any \$4.50 all-leather shoes.

Steel Shoes, 9 inches high, \$3.50 a pair, are better than the best all-leather \$5.00 shoes.

Steel Shoes, 9 inches high, with extra quality of leather, \$4.00 a pair, are better than the best all-leather \$5.50 shoes.

Steel Shoes, 12 inches high, \$5.00 a pair, are better than the best all-leather \$6.00 shoes.

Steel Shoes, 16 inches high, \$6.00 a

pair, are better than the best all-leather shoes regardless of cost.

**Get "Steels" and Enjoy Real Comfort—**

**Then tell Your Neighbors About It!**

**ORDER A PAIR TO-DAY.**

Learn by actual test, the tremendous advantages of "Steels."

We will fill orders for "Steel Shoes" direct from this advertisement, under a positive guarantee to refund the purchase price promptly, if upon inspection you do not find the shoes exactly as represented.

Remit the price of the size and style of shoes you wish. Be sure to state size of shoe you wear.

We will ship shoes promptly, safe delivery guaranteed anywhere.

**A Style of Shoe for Every Use.**

For all classes of use requiring high cut shoes, such as ditching, lumbering, hunting, etc., our 12-inch or 16-inch high steel shoes are absolutely indispensable. They give the utmost possible protection.

We strongly recommend the 6-inch high Steel Shoes at \$3.00 a pair, or the 9-inch high Steel Shoes at \$4.00 a pair—for general work under all conditions.

Fill out, tear off and mail the Order Blank to-day.

**STEEL SHOE CO., Dept. 76, Racine Wis.**  
Canadian Branch, Toronto, Canada.

**Order Blank for Steel Shoes.**  
**Steel Shoe Co., Dept. 76, Racine, Wis.**

Gentlemen:—I enclose.....

for \$..... in payment for....

.....pair Steel Shoes.

Size.....

Name .....

Town .....State.....

County .....R.F.D....

Dealer's name .....



travel, nine passengers inside and two with the driver, the fine horses, the cheery horn, the splendid scenery, the various little watering places along the road, the green hills and valleys of the old Sweet Spring, like "the vale of Avoca," the simple old buildings so different from the heavy, hot brick ones of the present day.

We took our dinner at "Crow's," a noted hostelry in those days, and then, proceeding at a rapid pace, we came in sight of the Greenbrier White Sulphur just as the last rays of the setting sun illumined the scene. I thought I had never seen anything more lovely than the place in its deep green seclusion, though the buildings were primitive and inconsiderable, compared to what they are nowadays. The place was at that time the exclusive property of Mr. Caldwell, who so highly esteemed the waters that he had been heard to say he gave the board to the visitors, only charging for the water. The spring was covered by a small temple, surmounted by a statue of Hygeia, presented by Mr. Henderson, of New Orleans. The place was entirely under the control of the noted Anderson, the tyrant of the White Sulphur Springs, who did not hesitate to turn off indiscriminately applicants for this American Almack. Knowing his character, however, my aunt and chaperone, Miss Deborah M. Couch, of Richmond (a very remarkable woman), took the precaution of obtaining from Judge Robert Stanard, of Richmond, an order for his pleasant cottage on Paradise Row. On Mr. Anderson's refusing to admit us and holding out no hope for the future, Miss Couch produced Judge Stanard's order, much to his discomfiture, so he was reluctantly compelled to allow us to remain, but gave us for the time a wretched cabin below the kitchen where the groans of a sick man kept us awake all night. Our temporary domicile gave us a commanding view of the kitchen, in which next day, during our brief sojourn, we could see the cook put into a cauldron, rivalling that of the witches, all the meats for dinner. The baker occupied a table outside on which he made the pies. The stewed apples were placed in a trough and, being grateful diet for the hogs, there was a continued battle between them and the baker for the ascendancy. In the afternoon my aunt so strenuously insisted on Mr. Anderson's giving us a place in Paradise Row, assuring him that unless he did so he would find her worse than a third day ague and fever, that he capitulated, and before night we were installed in Judge Stanard's cottage.

There was a ball each night, and dancing was carried on vigorously despite the hot weather. The music consisted of three fiddlers and a piper, and they played "The Coquette," "The Basket Cotillion," "The Cauliflower," "The Arkansas Traveller," "The Forked Deer," "Snow Bird on

## ONCE OVER IS TWICE DISKED

**(Patented)**

**If You Use An Imperial Flexible Frame Double Disc Harrow**

A complete Foretruck Disc Harrow (out-throw) with a second pair of disc sections (in-throw) attached by a jointed frame that harrows the ground twice at one operation, saving one-half in time and nearly one-half in horsepower. The forward pair of disc sections cuts the ground and throw it outward; rear pair works it again and throws it back, leaving the surface level and finely pulverized. The soil is put into better condition for seeding than after two workings of an ordinary disc.

Unequalled for discing corn stubble, plowed ground, or for any purpose for which an ordinary disc harrow could be used.

Disc at our risk and test our statements. Any dealer who handles our implements is authorized to put them out on trial with intending purchasers. Write us for descriptive circular and full particulars.

Only one more horse required than would be used in a single Disc of the same width cut; four are sufficient for the 6 and 7 foot sizes.

**THE BUCHER & GIBBS PLOW CO., 814 East Seventh St., CANTON, O.**

## SAN JOSE SCALE

### Read These Extracts from Reports

C. A. Hyatt, Croton-on-Hudson, N. Y.—"I found your spray very satisfactory. Would say I gave it several tests."

C. A. Hanson, Riverside, R. I.—"I had very good results. Some of my trees I did not expect to live but they have come out all right."

T. J. Shoemaker, Mt. Clemons, Mich.—"We used your spray with very gratifying results. Trees we thought past helping have been saved and the orchard is free from scale."

Andrew Cobble, Middletown, Pa.—"Your spray is all right, it kills all the scale and is much cheaper than others."

H. D. Bailey, Troy, N. Y.—"I tried both lime-sulphur and your spray. I feel confident your spray is working far better than the lime-sulphur."

O. P. Swartzel, Dayton, Ohio.—"Not a vestige of scale remains. I believe you have the best remedy for scale on the market."

**WRITE NOW FOR OUR FREE BOOK**  
**Saves 50 Per Cent.**  
**IN COST OF KILLING SCALE**

**F. G. STREET & COMPANY, 27 Railroad Street, Rochester, N. Y.**

NEW  
GERMAN  
CLOVER.  
NEW SEED RYE  
NEW SEED OATS  
NEW SEED WHEAT  
AND A FULL STOCK  
OF OTHER FIELD  
SEEDS.

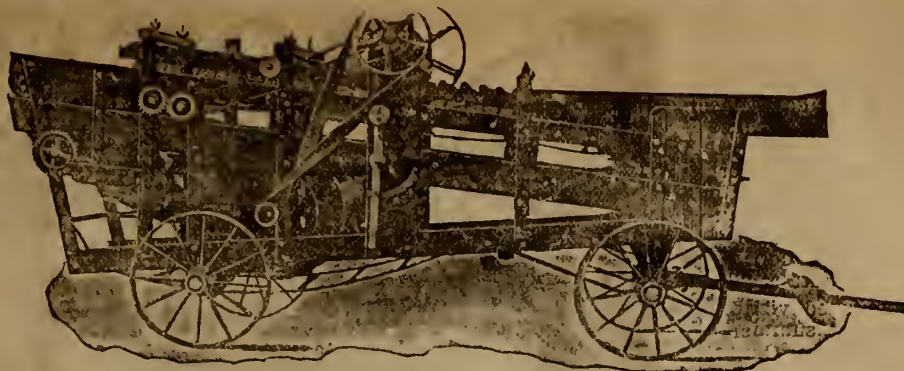
**N.R. SAVAGE & SON.**

**SAVED \$1000**

**1215 E. CARY RICHMOND, VA.**

HAY  
GRAIN  
MILL FEED  
ROCK SALT  
AND FOULETRY  
SUPPLIES.  
WRITE FOR  
PRICES.





# The BENTHALL Peanut Picker

## Makes Peanut Growing Doubly Profitable

Whether you grow peanuts extensively or not, the Benthall Peanut Picker will prove the most profitable investment you ever made.

With one you can double and treble your profits. You and your boys can do the work of forty hands, and do it better.

Think of it! Figure the wages of forty hands, then think of that much saved in hired help.

Such a machine will pay for itself many times over.

With one you can pick when the vines are in any condition, thus saving them for hay, and moreover, they keep the feed clean.

The peanut vine is the equal of alfalfa as a forage crop, and worth from \$12 to \$20 per ton.

This feature alone makes it an economy to own a Benthall Peanut Picker.

### Substantial, Simple, Economical

These machines are built to stand up under wear, so simple they can't get out of order, and economical because the repair bill will amount to practically nothing.

The machine will pick Spanish and Virginia varieties equally well.

It can be run by a single horse, team or applied power.

### What Farmers Say

Mr. W. T. Sampson, of Suffolk, Va., writes:

"The machine is more than you claim for it. I have picked as high as 240 bags in nine hours and a half. I have picked approximately 5,000 bags this season, and my legitimate repair bill was the cost of one link to a chain."

From Virginia and North Carolina, Texas and Tennessee we are receiving testimonials from users who have become warm-hearted friends.

### Do Not Delay

Every peanut grower will eventually have one of these pickers.

If you, yourself, have not sufficient use for one, you can make it a valuable investment picking peanuts for your neighbors.

The machine can be moved as easily as a wagon. Last year we did not have enough machines to meet the demand.

If you want to be sure of getting one, order now. Clip off the below coupon, fill it out and mail to-day, and you will receive free our handsome catalog and full information.

Three clips of the scissors between you and bigger profits.

CUT HERE

Benthall Machine Co.,

Suffolk, Va.

GENTLEMEN:

Please send me full information about the Benthall Peanut Picker.

Name \_\_\_\_\_

Address \_\_\_\_\_

the Ash Bank," "Billy in the Low-Grounds," and other good old fashioned tunes. Col. Barney, of Baltimore, was master of ceremonies, like Mr. Angela Si'as Bantam, at Bath, calling out the figures and complimenting the girls. Occasionally, to the great delight of the crowd, the musicians broke forth into "Barney, leave the girls alone."

The great belles of that season were Miss Lizzie Cabell, of Richmond (aunt of the more recent Richmond belle of that name); Miss Pierce, of Kentucky; Miss May, of Petersburg, and Miss Cole, of Williamsburg. The galopade was first danced this summer. After dancing at the balls refreshments (falsely so-called) were handed, consisting of choky pound cake and small glasses of sangarie, exciting a great thirst for cool water,

# FIELD SEED

We have just received a nice stock of New Seed Rye, New German Clover, New Red Rust Proof Seed Oats, New Winter Seed Oats, and have a full stock of all other Field and Grass Seeds. Will be pleased to send samples, and make prices on application.

N. R. SAVAGE & SON,

Richmond, Va.

which it was difficult to get at that hour.

There were no Saratoga trunks in those days, the wardrobes of the greatest belles occupying only one trunk and that a small one, covered with hair and studded with brass nails. It was rare in those days to

see a young lady with more than one hat or bonnet. It was quite usual to see them wear a calash bonnet of green silk like a buggy top which, unless held by a small string, would fly back like Mrs. Skewton's in "Domby and Son."

Fine, solid gingham, looking like



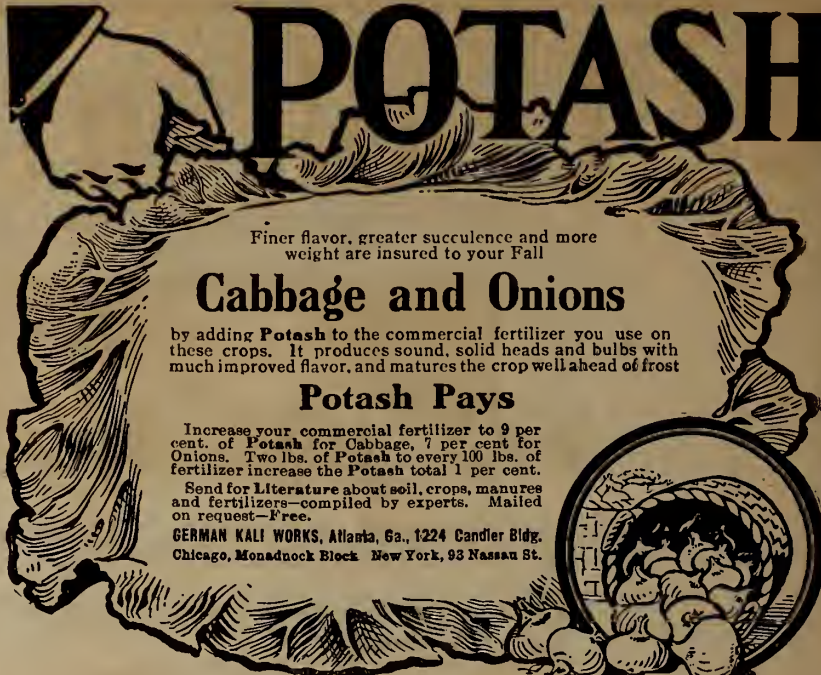
silk had just come into fashion, and one of the belles of the White Sulphur—Miss Lizzie Cabell—had one of pale blue, and another of salmon color, which she wore in the day time with long sleeves, but removed these at night and appeared in the ball room in the same dress with short sleeves or thin white sleeves, white cameo earrings and combs, her beautiful brown hair with curls in front, in which were interspersed delicate white flowers from the mountain side.

Amongst the distinguished visitors at the White Sulphur that summer I may mention Judge Salmon Chase, whose classical features and intellectual countenance rise distinctly before my memory. I could scarcely realize that so young a man could be a judge, as I had never seen any but elderly men in that capacity, Judge Marshall, Judge Barbour and Chancellor Taylor, for instance. Yet, despite his scholarly appearance and refined manners, Judge Chase was at that time an unsuccessful suitor to the beautiful Miss Lizzie Cabell.

Another distinguished guest was the venerable Mr. Maury, aged eighty-two, who had been consul at Liverpool for forty years. His sons were with him and his daughter, a blooming English girl, whose sunny tresses contrasted beautifully with her father's snowwhite hair. The English traveller, Murray, was also there, and gave pleasure by his performance on the piano, and the information he conveyed about English literature. Dickens and Thackeray were not known then, but we were interested in hearing Mr. Murray tell about Warren, who had just published the first volume of "Diary of a Physician, or Ten Thousand a Year," and we were surprised by the information that the writer was not a physician, but a lawyer, and an intimate friend of Mr. Murray.

General Poindexter was also at the White Sulphur that season, travelling in considerable style, in a coach and four. He was even then conspicuous in political life. Some years afterwards, in one of the Southwestern cities, he mistook the door, stepping out and falling from a height of many feet. He was reported dead and many obituaries of him were published, some not very complimentary, but he recovered and read them all.

Jesse Burton Harrison, of Lynchburg, one of Virginia's most gifted sons, mingled in the elite social circle that graced the Springs. He was a graduate of Harvard and distinguished himself there so highly that Thomas Jefferson wrote his father a very complimentary letter on the subject. Mr. Harrison made the tour of Europe with the intention of getting a professorship in Germany, but he abandoned the idea, he said, because he saw there so many learned men whose reputations never extended beyond their college walls. His son, Burton N. Harrison, was Secretary



# POTASH

Finer flavor, greater succulence and more weight are insured to your Fall

## Cabbage and Onions

by adding Potash to the commercial fertilizer you use on these crops. It produces sound, solid heads and bulbs with much improved flavor, and matures the crop well ahead of frost

### Potash Pays

Increase your commercial fertilizer to 9 per cent. of Potash for Cabbage, 7 per cent for Onions. Two lbs. of Potash to every 100 lbs. of fertilizer increase the Potash total 1 per cent.

Send for Literature about soil, crops, manures and fertilizers—compiled by experts. Mailed on request—Free.

GERMAN KALI WORKS, Atlanta, Ga., 1224 Candler Bldg.  
Chicago, Monadnock Block New York, 93 Nassau St.

ESTABLISHED 1850.

1,200 ACRES.

# TREES!

We are wholesale growers of first class nursery stock of all kinds, Fruit, Shade, Ornamental Trees, Shrubby, Hedges, Small Fruits, etc., Asparagus, Strawberries, and California Privet in large quantities.

The BEST is the CHEAPEST. Ours is the CHEAPEST because it is the BEST. Handling Dealers' orders a specialty. Catalogue free.

## FRANKLIN DAVIS NURSERY COMPANY.

### Baltimore, Maryland.

## ..ELMWOOD NURSERIES..

WE ARE GROWERS AND OFFER A FINE ASSORTMENT OF

APPLES,  
CHERRIES,  
NECTARINES,  
GOOSEBERRIES,  
RASPBERRIES,  
ORNAMENTALS,

PEACHES,  
PLUMS,  
GRAPE VINES,  
STRAWBERRIES,  
ASPARAGUS,  
SHADE TREES.

PEARS,  
APRICOTS,  
CURRANTS,  
DEWBERRIES,  
HORSERADISH,  
HEDGE PLANTS,

WRITE FOR CATALOGUE.

## J. B. WATKINS & BRO, Midlothian, Va.

TELL THE ADVERTISER WHERE YOU SAW HIS ADVERTISEMENT.



Look at It!



IT'S IN THE LANDSIDE

# A STRONG SENSIBLE SERVICEABLE PLOW

NO

SHARP ANGLES TO BREAK OFF  
TILTING OF HANDLES TO MAKE THE PLOW GO IN THE GROUND  
ON OCCASION TO BREAK THE THIRD COMMANDMENT

# BECAUSE

The Model used by us---The Sloping Landside and Center Draft, Coupled with our Interlocking Landside Device---makes our Plow retain its ORIGINAL SHAPE under any and all conditions. Each part bearing its own burden and transferring its strain direct to the foundation of our plows prevents straining away from its original positions of any of the parts, consequently our SUCK AND GATHER IS PRESERVED DURING ENTIRE LIFE OF PLOW, AND IS ABSOLUTELY ASSURED EVEN WHEN BOLTS BECOME LOOSE.

JUST THE PLOW YOU HAVE BEEN WAITING FOR.

BEFORE INVESTING YOUR MONEY IN ANOTHER CHILLED PLOW, Write to us for further particulars

## The Wm. J. Oliver Mfg. Co.

KNOXVILLE, TENNESSEE.

N. B.--WHY Don't Other Manufacturers show LANDSIDE views of their Plows?



to Jefferson Davis during the late Civil War.

Mr. Johns, a very polished Episcopal minister, preached in the ball room Sunday morning. He afterwards became Bishop Johns of the Diocese of Virginia. But perhaps the most distinguished of all the guests at the White Sulphur that season was the distinguished William Wirt, Attorney-General of the United States. He and his family were in deep mourning for his lovely young daughter, Agnes, who had recently died. There was an interesting young man with them Mandeville Carlyle who was said to have been the affianced lover of this daughter. Mr. Wirt was an intimate friend of my aunt's. Approaching her cottage, he called out playfully: "Miss Couch, will you accept the visit of an old man of eighty?" After he had paid us a most pleasant visit and taken his departure, I remarked to my aunt that I would never have taken him to be so old, on which she laughed heartily at my being so literal, and told me that Mr. Wirt was really not more than fifty-five. The reputation he had made as the author of "The British Spy," "The Old Bachelor," and "The Life of Patrick Henry," was quite eclipsed by his still greater fame as a jurist and statesman.

Many of the Virginians had very handsome equipages, some of them coming in a coach with four horses. The South Carolinians also were remarkable for their fine horses and carriages, many of them also bringing saddle horses. It was also not unusual for visitors from the Northern States to come in their own carriages. I remember particularly a widow lady from New York with her only daughter, a lovely young woman, who died at the springs, so the broken-hearted mother got in her carriage and drove away alone with the pillows and other belongings of her invalid daughter.

Parties quite frequently went to Lewisburg to spend the day, and so primitive were those times that young ladies often went to the cabin of Aunt Becky Barnard (an old colored woman) to partake of a luncheon of hot corn. There was a great black bear which we used to go to the creek to see bathe, and sometimes we had the excitement of seeing a deer bound through the grounds, pursued by huntsmen with horns.

If the arrangements were simple and primitive in those days, at least the tone of society was elegant and refined, and there was as much social enjoyment as you could find today at the most "swell" and luxurious pleasure resort. In fact, I believe there was more.

At length, when September was far advanced, and the nights growing cool and the mornings damp amid the mountains, we turned our faces homeward, in one of "Extra Billy Smith's" comfortable coaches, after two months

## Get the Most Money Out of Your Lands

by making them yield the biggest possible crops. Grain must get the nourishment that makes it grow out of the soil—and the more plant food there is in the soil, the quicker and bigger and more plentifully the grain will grow. But you must first put the food into the soil by liberally using

## Virginia-Carolina Fertilizers

Then a big bumper crop is assured, because these fertilizers contain the necessary elements required by the soil to properly and fully mature the grain. Farmers invariably find that the more Virginia-Carolina Fertilizer they use, the bigger is the crop, and the greater their profit.

Have you gotten the latest Virginia-Carolina Year Book or Almanac, the most useful and valuable book any farmer or grower can read? Get a copy from your fertilizer dealer, or write to our nearest sales office and one will be sent you free.

### Virginia-Carolina Chemical Co.

Richmond, Va.	Durham, N. C.
Norfolk, Va.	Charleston, S. C.
Columbia, S. C.	Baltimore, Md.
Atlanta, Ga.	Columbus, Ga.
Savannah, Ga.	Montgomery, Ala.
	Memphis, Tenn.
	Sturtevant, La.



## Ground Phosphate Rock

Superior to Bone or Acid Phosphate for Alfalfa and Clover, and at one-fourth the cost. See editorial, June issue this paper, "Alfalfa in Eastern Virginia."

FARMERS' UNION PHOSPHATE CO., BIRMINGHAM, ALA.

delightfully spent amid the mountain resorts of old Virginia.

AMERICAN SAW MILLS.  
The American Saw Mill Machinery

Co. advises us that it will have an attractive exhibit at the forthcoming State Fair in October, and our readers are cordially invited to inspect it.



HON. HENRY FAIRFAX, Pres., ALFRED B. WILLIAMS, V. Pres., M. A. CHAMBERS, Sec.

# 6 DAYS VIRGINIA STATE FAIR 6 NIGHTS

RICHMOND, VA.

October 4-5-6-7-8-9

## LARGEST LIVE STOCK SHOW ON ATLANTIC SEABOARD

Immense Agricultural and Horticultural Displays.  
Come and meet your friends and see their exhibits.



ENTRIES IN ALL DEPARTMENTS CLOSE SEPTEMBER 14

\$40,000.00 IN PREMIUMS AND PURSES

\$6,500 WILL BE AWARDED FOR CATTLE AS FOL-  
LWS.

Red Polled, \$1,000; Short Horns, \$800; Herefords, \$550; Aberdeen-Angus, \$500; Virginia Beef Breeds, \$400; Holstein-Friesian, \$400; Guernsey, \$400; Dutch Belted, \$450; Jersey, \$400; Devons, \$255; Galloways, \$255; Ayrshire, \$255; Kerry, \$255; Brown Swiss, \$255; Fat Cattle, \$160; Sweepstakes, \$240.

\$4,300 FOR EXHIBITION HORSES.

Percheron or French Draft, \$300; Clydesdale, \$260; Belgian, \$260; Suffolks, \$260; Grade Draft, \$170; Draft Teams, \$60; Thoroughbred, \$260; Standard Roadster, \$260; General Purpose, \$130; French Coach, \$260; German Coach, \$260; English Hackney, \$260; Stallion Sweepstakes, \$35; Gaited Saddle Horses \$400; Shetland Ponies, \$160; Other Ponies, \$160; Jacks and Jennets, \$260; Mules, \$150; 29 gold and 19 silver medals and 2 silver cups will also be awarded in the Horse Department.

\$1,700 FOR SHEEP.

Cotswold, \$140; Southdown, \$140; Shropshire, \$140; Hampshire, \$140; Oxford Downs, \$185; Dorset Horn, \$140; Cheviot, \$111; Lincolns, \$107; Leicester \$107; Merino (American or Spanish) \$122; Delaine, Dickinson or Black Top Merino, \$122; Rambouillet, \$121; Angora Goats, \$124; Fat Sheep, \$13.

\$2,100 FOR SWINE.

Berkshire, \$264 also \$50 silver loving-cup; Poland-China, \$264; Chester White, \$264; Duroc-Jersey, \$264; Large White Yorkshires, \$264; Tamworths, \$145; Essex, \$124; Victoria, \$124; Large Black, \$124; other distinct breeds, \$144; Barrows, \$17.

\$700 FOR POULTRY.

Uniform first and second prizes of \$2.50 and \$1.00 for pens and \$1.50 and 50c. for single birds are offered for all breeds and strains that are known. There are also premiums for ornamental fowls and pet stock including rabbits, guinea pigs, turkeys, ducks, geese, pea-fowl, guinea-chickens and pigeons. Seven silver loving-cups will also be awarded in this department. There will also be a KENNEL SHOW for hunting dogs viz.: pointers, setters, beagle hounds and collies for which prizes will be awarded.

OF THE GRAND TOTAL OF \$40,000.00 FOR PREMIUMS, MORE THAN TWO-THIRDS IS DEVOTED TO HORSES, (EXHIBITION) CATTLE, SHEEP, SWINE, POULTRY, GRAINS, FRUITS, VEGETABLES AND OTHER FARM PRODUCTS.

ALL RAILROADS WILL CUT FREIGHT RATES IN HALF BY RETURNING EXHIBITS TO ORIGINAL SHIPPING POINT FREE OF CHARGE. CHEAP EXCURSIONS ARE ALSO BEING ARRANGED.  
FOR PREMIUM LIST AND ALL INFORMATION ADDRESS,

MA K R. LLOYD, General Manager, 809 E. Main St.,

RICHMOND, VA.

### "KING CORN SPECIAL"

Contest to raise standard of corn grown in Virginia, \$1,200, already subscribed for prizes. On basis of \$2,000, prizes will be awarded as follows: Best ear white corn grown in Virginia, \$450; Best 10 ears same, \$450; best 20 ears same, \$450; Best ear Yellow Corn grown in Virginia, \$250; best 10 ears same, \$250; best 20 ears same, \$250. Also sweetstake prizes consisting of \$125 International Corn Binder and other agricultural machinery.

NEARLY \$11,000 FOR AGRICULTURAL AND HORTICULTURAL EXHIBITS.

Includes Domestic Products, Home Made and Dairy Made Butter and Cheese, Grains, including Longberry and Fultz Wheat, White Black and Mixed Oats, Barley, Rye. Premiums for Hay, Clover, Alfalfa, Millet and grasses, \$55 for acre yield of same. First and Second prizes of \$75 and \$50 for acre yield of both "highland" and "lowland" corn. \$350 for vegetables, including Potatoes and other root crops. For County Exhibits of farm products \$225 has been appropriated as follows, 1st prize, \$100; 2d prize, \$75; 3d prize, \$50. For tobacco, including sun cured, olive stemming, brown stemming, and brown shipping, "flue cured" wrappers, cutters, fillers and smokers, also Burley Tobaccos, \$500 will be distributed. Liberal premiums for peanuts and apiary supplies and products. \$600 will be distributed for apples and generous amounts have been set aside for peaches, pears, plums, quinces, grapes, apricots and other fruit. Fruit package and nursery exhibits are included in the Horticultural Department.

One of the features of the Fair will be the display of Plants and Cut Flowers for which prizes amounting to nearly \$200 will be awarded. The prizes are divided for professionals and non-professionals.

### DOMESTIC MANUFACTURES, ART, ETC.

Provision has been made to care for and award premiums for large exhibits of preserves, canned fruits, and vegetables, jellies, pickles, bread, cakes, pies, pastries, candy, wines and soap.

Needlework, embroidery, hand-woven work, basket work, arts and crafts work, pyrography, children's work, manual training products, paintings and drawings will be awarded a large share of the premiums.

Exhibits of farm implements and machinery are solicited, ample provision having been made for same.



## THE BIG GRAND AMERICAN HANDICAP AT CHICAGO SHOT A HERO INTO THE SHOOTING WORLD.

Fred Shattuck of Columbus Demonstrated His Nerve.

Every year the best shotgun shots in the land assemble in competition for the greatest of all shooting honors—the Grand American Handicap. The big shoot is usually held the last week in June, which gives the men practically three months to get their aim in trim. Trap shooting is virtually warm weather sport, though many of the inveterates crack away at the flying clay saucers all winter long.

This year, the Grand American was held at Chicago, with the big event scheduled for Thursday, June 24th. Sunday saw the well known shooters rolling in from all the four corners of the United States. Monday and Tuesday everybody went out to practice—that is, get used to the "conditions," such as the background and flight of targets. On these days every man stands on an equal footing. That is, sixteen yards back of the traps from which the targets are thrown. Wednesday a Preliminary Handicap was held. On this day every man stands at the position he will shoot from in the big event next day. The poorest shots are placed at sixteen yards, the best as far back as twenty-one yards, and the others at seventeen, eighteen, nineteen and twenty yards, according to the judgment of the Handicap Committee, who know the records of each one. Thus every man has an equal show.

When the Grand American Handicap started on the fourth day, the quiet determination of the four hundred and fifty or more seasoned shooters created an atmosphere that is hard to explain. Perhaps it was something like the start of the famous Olympic Marathon race at Windsor Castle—men keyed to the breaking point though outwardly as cool as ice.

Fred Shattuck, of Columbus, Ohio, the winner, gave such a demonstration of pluck that his name will always be prominent in the shooters Hall of Fame. The race is for the best score out of one hundred targets. After eight had been shot, one man had missed only one, and several only two and three. Shattuck had missed four. The last twenty targets try a man's mettle and Shattuck, knowing this, counted himself in the race though some thought he had little show. He had the grit and skill to break those last twenty without a miss, which gave him a total of ninety-six. All eyes were on Shattuck now, when it was learned that three other leaders in the race had missed enough to make their score ninety-six and tie him. His twenty straight under such a strain as that was marvelous shooting. The four men who were tied then had to shoot it off on a string

of twenty-five targets. This is the most grueling test of all. Shattuck was at nineteen yards. Two men had an advantage of him—one at sixteen yards and one at seventeen yards. The referee lined up behind the four men and the race started anew. "Dead! dead!" he shouted, as Shattuck broke bird after bird. It was not a runaway race, for all were scoring breaks with clock-like regularity. The twenty-fifth bird was reached—all had missed but Shattuck. Crack! and he breaks the target clean as a die. Then a great shout for one of the gamest finishes ever recorded—forty-five straight. Who could beat that? All hats were thrown in the air to Fred Shattuck.

Shattuck lays much importance upon the fact that he used UMC Steel Lined Shells which have a tough band of steel around the smokeless powder. No other shell made has this improved feature. One man is re-



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Insoluble Phosphoric Acid. ....	2 to 3 per cent.
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Magnesia .....	5 to 6 per cent.
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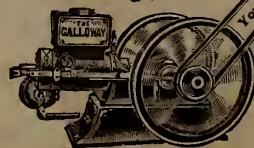
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ported to have remarked: "I never saw a man shoot with such confidence as Shattuck. There must be something extraordinary about those UMC shells he used. He makes the twelfth winner who has used them



and only eighteen Grand American Handicaps have ever been held!" "That's right," his friend said, "and no other make has won more than six. You can trust one of those boys to know the best shells on earth. They aren't going to take any chances of losing out."

ONE OF THE OLD TIME EDUCATORS OF THE SOUTH.

Mary Washington.

Among the early educators of Virginia whose diligent, faithful and intelligent work paved the way for higher and broader achievements in this line, I may mention Dr. Gessner Harrison, one of the earliest graduates and subsequently one of the earliest native professors at the University of Virginia. He was the son of Dr. Peachy Harrison, of Harrisonburg, Virginia, who himself was a man of fine capacity and of distinction. He was a member of the Senate of Virginia, and of the famous Convention of 1829-1830, for internal improvement. He was the leading physician of Rockingham county, so he was prominent both in the medical profession and politics. He was very fond of reading, and his admiration for the Swiss poet, Gessner, caused him to bestow that name on his son. The latter was born June 26, 1807. He early showed his bent towards learning, and he began to attend school at four years of age, to study the Latin grammar at eight. When nearly eighteen, he, with his

older brother, Edward, entered the University of Virginia, whose first session opened in March, 1825. Mr. Jefferson drew bitter censure on himself by importing nearly all of his professors from Europe. As his University was to be widely different from anything existing in America, he wanted men new to the country. This course on his part drew forth

indignant comments from "The Boston Courier," "The Connecticut Journal," and "The Philadelphia Gazette," the latter pronouncing it "one of the greatest insults the American people have received." The original faculty was composed of Long, Key, Bonnycastle and Dunglison, of England; Blattermore, of Germany, with Emmett and Tucker to

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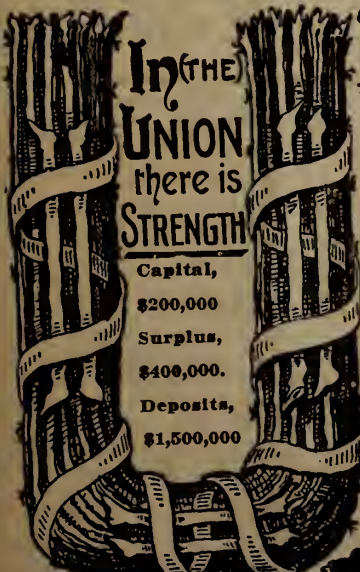
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represent American scholarship, although they too were foreign born, but educated in the United States. Mr. George Long was professor of Ancient Languages, and Dr. Blattermore (a remarkable linguist) was Professor of Modern Languages. Mr. Key was Professor of Mathematics for the first three years of the University's existence, and then that position was given to Mr. Bonnycastle (at first Professor of Natural Philosophy), who continued to fill it from 1828 until his death in 1841.

Dr. Dunglison, of England, was Professor of Medicine until 1833, when he moved to Philadelphia. By the way, Admiral Robley D. Evans' peculiar middle name, "Dunglison," was conferred on him by his father on account of the latter's admiration for Dr. Dunglison, whose pupil he was at one time.

Dr. Emmet, Professor of Chemistry and "Materia Medica" from the opening of the University until his death in 1842, was a native of Dublin, but was brought to this country in his childhood by his father, a famous Irish patriot, and was educated in New York. His native genius, his varied scientific attainments, his brilliant wit and eloquence, together with his warm heart and social virtues, won for him the admiration and affection of his colleagues and pupils.

Mr. George Tucker, the Professor of Moral Philosophy, was a native of

Bermuda, but was educated at William and Mary College.

In July, 1828, at the close of the third session, the first graduates of the University were declared, viz., three in Greek, three in Mathematics, one in Chemistry and three in Medicine. The graduates in Greek were Gessner Harrison, Henry Tutwiler, and Robert M. T. Hunter. Gessner Harrison was also one of the graduates in Medicine, with the title of M. D. He expected to enter at once on his medical career, but matters took an unexpected turn, which led to his becoming a professor instead of a physician.

The London University had just been established, and Mr. Long and Mr. Key, each being a master of arts, and the former a fellow of Trinity College, were induced to return to England and take the chairs of Greek and Latin in the new institution.

On being consulted by some of the visitors in reference to his choice of his successor, Mr. Long advised not to get another professor from England for various reasons, but particularly because he thought they had there a man who was fitted for the place, a Virginian, viz., Dr. Gessner Harrison, whom he recommended for the position. Mr. Long himself had become a professor at the age of twenty-four, but Dr. Harrison was barely twenty-one, and had never been outside of Virginia. The visitors gave him the appointment tempo-

rarily, for one year, but the next year they made it permanent. These visitors were men of the highest stamp—Chapman Johnson, Joseph C. Cabell and Madison, who was Rector at the time, so it was truly an honor to receive the position from such men.

In 1830 the young Professor was married to Miss Eliza Tucker daughter of Mr. George Tucker, the Professor who taught Moral Philosophy, and the union proved to be one of rare suitability and happiness.

To Dr. Harrison is due the credit of being one of the first American professors, if not the very first, who made use of comparative philosophy to elucidate the classical languages. This science took definite shape in Germany during the second quarter of the nineteenth century, throwing a flood of light on both ancient and modern languages, but, though it is now in general use in all our universities and colleges, Dr. Harrison was far in advance of his age in applying it to the study of Greek and Latin, which he did at a time when such teachings were unknown in English universities, and only heard at a few points in Germany. His mind had a natural bent in this direction and he had been at work on it several years before the German Savans published to the world their theories on the science of language. This first took definite shape in Bopp's "Comparative Grammar," published in 1833,

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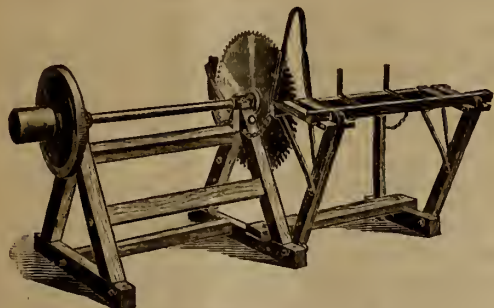


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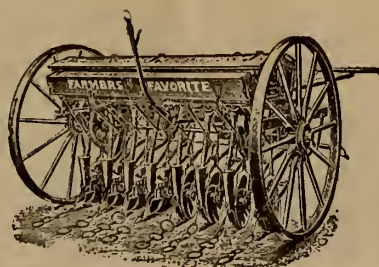
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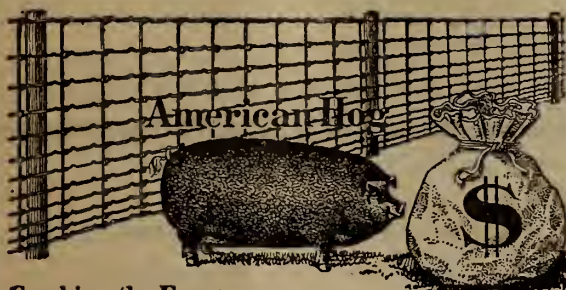
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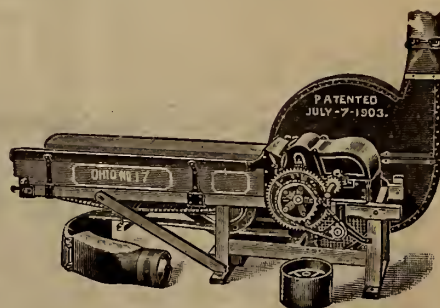


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the sixth and concluding part not appearing until 1852. A copy of the earlier portion of this work were sent to Dr. Harrison by his former teacher, Mr. Long, and he seized upon it with avidity, taking intense delight in applying comparative etymology to the elucidation of Greek and Latin. When Mr. Schele De Vere entered the faculty of the University of Virginia in the fifties, he found that his colleague, Dr. Harrison, had long been making free use of comparative philology at a time when it was scarcely applied at all in German universities to the explanation of Greek and Latin. Dr. Harrison wrote a work on the application of comparative etymology to Greek and Latin, which, when shown about eighteen years later by an American student to Professor Curtins of Leipsic, the head of all living scholars in etymology, the latter remarked: "This is a good book—an excellent book for the time at which it appeared, though, of course, we have gotten a good way beyond it by this time."

Had Dr. Harrison been less burdened with the drudgery of elementary instruction he would, no doubt, have taken a distinguished part in the advancement of comparative philology. In the early days of the University the professors had to bear great burdens and to struggle against sore difficulties in seeking to raise

the standard of scholarship—owing to the lack of good preparatory schools. Nowadays there are so many more advantages and facilities for this preparatory work that the labors of the professors are much lightened, as well as those of the student. In those days education had to work from above downward. The better education had to begin in higher institutions by training teachers so well that they could afterwards send up pupils much better grounded in the elements than they had been. Every few years the toiling professor might in this way take a step a little higher, till by slow degrees he lifted the whole mass into some manifest though still comparatively slight elevation above its original position.

"There is something sublime," says Mr. John A. Broadus, in his interesting memorial of Dr. Gessner Harrison (1873), "in the spectacle of an unpretending, quiet, but deeply earnest and conscientious man with the classical education of a great Commonwealth, or of whole States resting upon him, slowly lifting up himself and his burden towards what they are capable of reaching. It was thus that Dr. Harrison toiled and suffered in the University for thirty-one years—and not in vain. During the latter years of this period he used to say that pupils were coming to him from the leading preparatory schools with a better knowledge of Latin and

Greek than was carried away by graduates of twenty years previous. It is marvellous to our older men when they remember how generally and in how high a degree the standard of education was raised in Virginia and in the South between 1830 and 1860. Let it never be forgotten that the University of Virginia did this, and there is no invidious comparison in saying that far beyond any other man it was due to Dr. Gessner Harrison."

In 1859, after over thirty years of faithful and efficient labor at the University, Dr. Harrison resigned from the faculty, and set up a boys' school in Albemarle, partly with a view to educating his younger sons, which he could not do amid the heavy pressure of duties at the University. The following year, 1860, he bought a place in Nelson county (Belmont) and transferred his school to that point. His prospects for success seemed most flattering, as he opened his school with one hundred pupils, but the War came on soon afterwards and had such an unfavorable effect on his school (many of his scholars being drawn from the far-off Gulf States) that it dwindled away and was finally brought to a close by his death, which occurred in April, 1862, after a short illness, which had not appeared very serious.

In addition to his intellect and his learning, he was a devout Christian

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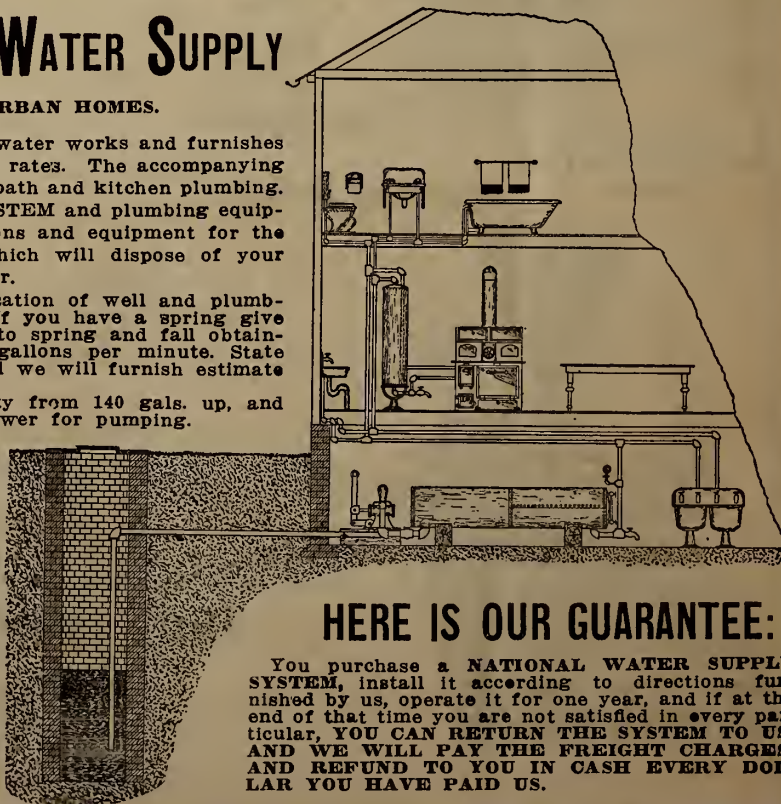
Send us rough sketch showing location of well and plumbing fixtures and give depth of well. If you have a spring give distance from house, fall from house to spring and fall obtainable in spring, branch, and flow in gallons per minute. State how much water required per day, and we will furnish estimate of cost free.

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and was simple, modest and unassuming, as really great men generally are. Miss Frederica Brenner, in describing her visit to Charlottesville while she was travelling in this country, speaks of "his beautiful, meditative eyes." They were the mirror of his pure mind.

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### COMMISSIONER OF AGRICULTURE Editor Southern Planter:

Referring to the letters printed in the August number of The Planter, I would like to give my opinion on the subject. The primary election will be over while I am writing these lines. I have no intention to interfere in the election of Mr. Koiner or Mr. Brown. Both gentlemen appeal to the public and to the farmers in particular. But it seems to me this appeal is really "pro forma" and is nearly useless.

For the county bosses and their staff make the ticket and make the election. If Mr. Koiner has enough political friends who are satisfied with the work of his office, he will be re-elected.

This office has become—as all similar offices—an affair of politicians; and whether Mr. Brown would have the will and ability to remove this character from the office remains an open question.

What urges me to write these lines is the letter of Mr. Todd (page 779) calling down Mr. Massey, denying him the right of having a judgment in this matter and advising him to retire to his cowpeas and crimson clover.

Mr. Todd's letter sounds to me like the song of a politician, and I have no doubt it is so.

Mr. Massey has done with his teachings more for the welfare of all

Southern farmers and consequently for the prosperity of the Southern States than all the politicians combined.

To tell Mr. Massey "to retire to his cowpeas" is an insult, not only to Mr. Massey, but to all the farmers who make good use of his teachings. To deny the right to make a judgment in such an agricultural matter to a man of the merit of Mr. Massey, I cannot understand. A man who does so must have much cheek; politicians, as a rule, are not bashful. Mr. Todd, if this is your strongest argument, your case will be lost, and you would do well to retire yourself to your cowpeas, if you have any.

Mr. Massey teaches the farmers how to get better crops from their land and thereby get a little more money. The politician knows how to spend properly and lawfully the farmers' money without coming short himself.

A NEW SETTLER.

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### A METHOD OF ERADICATING THE WILD ONION.

The office of Farm Management, United States Department of Agriculture, has now ready for distribution a circular giving a detailed discussion of the wild onion problem and outlining a plan whereby the pest can be exterminated. This circular will be sent free to any person requesting it.

## Wagons, Silos and Handy Trucks

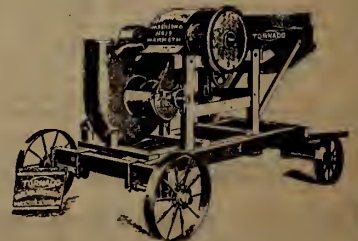
The Tornado Silo and Silo Fillers are the best. Cutters fitted with Spiral knives and shredding heads. In-changeable.



Handy Trucks with wood or steel wheels or all steel as desired, four-inch grooved tire. Greatest labor saver on the farm. Postal us for catalog or any information desired, or ask your nearest dealer for our goods.



Boston and Virginia Farm Wagons, Barbour Virginia, Peters, King, Taylor Canady and Anderson Buggies and Carriages. Fairbanks-Morse Gasoline Engines, Tanks, and Steel Towers. Myers, Empire and Fairbanks-Morse Pumps. Water Works designed and installed anywhere. J. I. Case and Altman-Taylor Steam Engines, Concrete Block Machines and Mixtures, Magnets and Batteries. Kansas City Hay Presses, and Gasoline Traction Engines. New Idea Manure Spreaders. Repairs and machinery of all kinds and for all purposes.



**HOENNIGER & SIZEMORE CO., Inc.,**

**MANUFACTURERS AGENTS AND JOBBERS, RETAIL STORE**

**1433 East Main Street,**

**Richmond, Virginia.**



# THE GIN THAT BRINGS THE COTTON

A MUNGER System Cotton Gin has no real competition for the favor of the grower. The MUNGER reputation for close ginning and high-grade sample is a standing advertisement that keeps the ginner busy.

## MUNGER THE PERFECT SYSTEM

The perfect construction and workmanship of MUNGER System Gins means freedom from breakdowns and repairs. The correct principle of the MUNGER System increases output, and prevents the delays that eat the profits.

MUNGER System Gin Outfits give choice of Munger, Pratt, Eagle, Smith and Winship Gins. Full line of Engines, Boilers, Linters, Baling Presses and all Cotton working Machinery-

### Continental Gin Company

Atlanta, Ga. Dallas, Texas  
Birmingham, Ala. Memphis, Tenn.  
Charlotte, N. C. Bridgewater, Mass.  
(For Export)

(Address Sales Office Nearest You)

Plans and Estimates Free.  
Catalogue on Application.



#### BOOKS AND PAMPHLETS.

Agricultural Bacteriology, by H. W. Conn, Ph. D. Second edition, revised and enlarged with sixty-four illustrations. Published by P. Blakiston's Son & Co., Walnut Street, Philadelphia. Price \$2.00.

This is an enlarged and revised edition of the excellent work on this subject by the same author published some years ago. The great attention now being paid germs and bacteria, both in animal and vegetable life, in relation to human beings makes a study of the subject of great importance to all engaged in the production of food products of all kinds. This book will be found to deal with all the different phases of the subject and should be widely read and studied.

A B C in Cheese Making. A short manual for farm cheese makers and dairy students, by J. H. Monrad. printed and for sale by Urner-Barry Co., 173 Chambers St., New York. Price 10 cents.

This will be found a very useful little book to those who contemplate going into the cheese trade. We hope to see our farmers take up this business. There is a great opening in the South where much cheese is consumed and none made. The business can be profitably carried on where it would not be possible to conduct a cream or butter making business with advantage.

The State of West Virginia. Its geographical location, topography, climatology, natural resources, and advantages, by Governor William E. Glasscock, Charleston, W. Va.

Mixing and Placing Concrete by Hand. Bull. 20. Published by the Association of American Portland Cement Manufacturers, Land Title Building, Philadelphia, Pa.

The Cement Workers Hand-Book, by W. H. Baker. Published by the Industrial Press Publishing Co., 847 Equitable Building, Atlanta, Ga. Price 50 cents.

Arkansas Rice—Its Growth and Possibilities Along the Cotton Belt Route. E. W. LaBeaume, St. Louis Southwestern R. R. Co., St. Louis, Mo.

Holstein-Friesian Association of America. Condensed report of Twenty-fourth Annual Meeting, Syracuse, N. Y., June, 1909. F. L. Houghton, Secretary, Brattleboro, Vermont.

The Farmers' National Congress of the United States. Official proceedings, 1908. The next meeting will be held in Raleigh, N. C., in November 1909. Col. Benahan Cameron, of North Carolina, is President for this year.

#### SELF-TYING BALERS.

Baling machines that automatically tie the bales is the latest production of the George Ertel Company. Their

#### KNOW Your Weights—Don't Guess

The successful farmer of to-day KNOWS the exact weight of the supplies he purchases; he KNOWS to a certainty how much the products weigh that he sells. Accurate weights are a big, vital feature in profitable farming. Public scales are expensive, unreliable and often situated at a distance, but every farmer can be sure of perfect accuracy if he owns an

### OSGOOD PITLESS SCALE

These Scales are absolutely reliable—warranted so: every farmer can now afford one. Prices range from \$45 to \$80.

Catalogue illustrates many styles of scales and contains valuable scale information. Write for it.

OSGOOD SCALE CO.,  
Box 205 Binghamton, N. Y.



one man, one-horse Daisy press, bales a ton an hour. The self-tying device now supplied with their Daisy presses is one of the most wonderful features ever placed on a baler, and has solved the problem that has been agitating the hay press world for years. Don't buy a press until you have written to the George Ertel Company, Quincy, Ill.

#### HAVE YOU ROOF TROUBLES?

We are carrying in our column advertising from Anderson the "Roof-Fix Man" of Elyria, Ohio, headed: "Tell me your roof troubles."

The "Roof-Fix Man" of Elyria.



Ohio, is publishing a new book on various kinds of roofing and on roof troubles. This book will be sent absolutely free to any of our subscribers who write for it. It will pay you to write and get a copy.

We will send you one of these books free if you mention the Southern Planter.

#### PREMIUM LISTS.

Virginia State Fair, Richmond, Va., October 4th to 9th, 1909. Mark R. Lloyd, General Manager, Richmond, Virginia. Send for a copy of the Premium List and see that you enter some of your products and come to the Fair.

Minnesota State Fair, Hamlin, Minn., September 6-11. C. N. Cosgrove, Secretary.

#### PERCHERON PRIZES.

The Percheron Registry Co., Columbus, O., sends us a list of prizes they have offered at the forthcoming Virginia State Fair, Richmond, Va., and covering seventeen classes in which gold and silver medals will be given as first and second premiums. They advise us that this offer is exactly a duplicate of the International list, and also the Alaska-Yukon Exposition. They have, therefore, placed our local State Fair on the same footing as others of national repute.

#### GLENBURN BERKSHIRES.

Dr. J. D. Kirk, Roanoke, Va., owner of the well known Glenburn Berkshire herd of Berkshires, advises us that he is at present overstocked with some very fine hogs of both sexes, at pretty much all ages. As Dr. Kirk's foundation herd is top notch breeding, our readers should lose little time in getting next to some of the bargains he is offering.

#### GREAT HEREFORD SALE.

Attention is invited to the full page advertisement of S. W. Anderson, Blaker Mills, W. Va., in which he is offering the entire Ingleside herd of Hereford cattle. It is with great regret that we chronicle the announcement of the dispersal of this herd, but Mr. Anderson's health is such that his physicians have advised him to retire and every animal will be sold without reserve or by bidding. In establishing the herd a number of years ago, Mr. Anderson got as good stock as was known in the breed, and has maintained the same high quality ever since, as evidenced by the fact that he has held his own in the Fair circuits in the heaviest competition. We hope very much that a number of our Virginia readers will go over the line to West Virginia and buy some of these cattle, and we can assure them in advance, of courteous treatment and entertainment by Mr. Anderson.

#### HAYWOOD COUNTY FAIR.

We have received the catalog of the fifth annual Haywood County Fair to be held at Waynesville, N. C. on October 5th to 8th, inclusive. It is an attractive booklet of seventy-two pages and is brimful of interesting matter for farmers, stock raisers, and persons engaged in other industries. All in all, more than \$3,000 is offered in premiums and purses, and this liberality will doubtless assure a mammoth exhibition of the mountain products.

#### THE MAIN CONSIDERATION.

At the siege of Fredericksburg, when the Confederates were enduring even more than their usual pangs of hunger, one of the Southern skirmishing parties made a sudden raid on an unsuspecting Federal brigade. After some interchange of firing, the assailants rushed upon their disconcerted enemy. One emaciated "Johnny" hurriedly emptied the knapsack of a prostrate soldier, and, straightening up, regardless of blades and bullets, waved his booty above his head.

"Charge 'em, boys, charge 'em!" he yelled. "They've got cheese!"

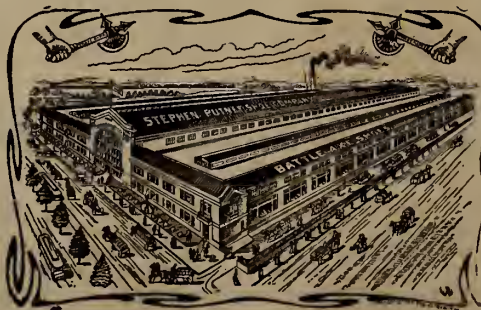
—Lippincott's.

A Neat Binder for your back numbers can be had for 30 cents. Address our Business Department.

# BUY BATTLE AXE SHOES

The Best Shoe for  
THE FARMER

Solid Made and  
Made to Stand  
The Wear



HIGH QUALITY  
RIGHT STYLE

Comfortable Fit  
Long Wear  
Low Price

Every Essential Feature of High Class Shoe  
Making is Embodied in BATTLE AXE SHOES

Ask your Dealer for this Celebrated, Widely-known and Widely-worn Brand of Shoes

THE FARMER'S FRIEND

Stephen Putney Shoe Co.

Richmond, Va.



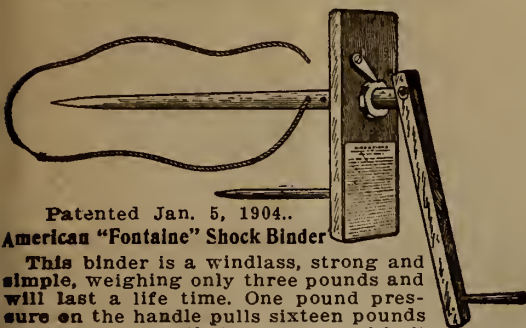
# LEADING 1909 UP-TO-DATE LABOR SAVING 20TH CENTURY MACHINERY.

## ROSS SILO FILLING MACHINERY

With BLOWER and Travelling FEED TABLE



Made in sizes to suit all wants from 5 to 15 Horse Power Engine. Sold on their own merits. Pay for same after tried and satisfied. Write for catalogue Largest Capacity and Strongest Built.



Patented Jan. 5, 1904.

American "Fontaine" Shock Binder

This binder is a windlass, strong and simple, weighing only three pounds and will last a life time. One pound pressure on the handle pulls sixteen pounds on the rope so that one man with it can easily apply a pressure of over 500 pounds, thereby compressing a shock at the top so tightly that it will not fall or be blown down, and will not be injured by getting wet inside when it rains. Both ends of the rope are drawn by this binder so that the shock is compressed evenly without being pulled over to one side.



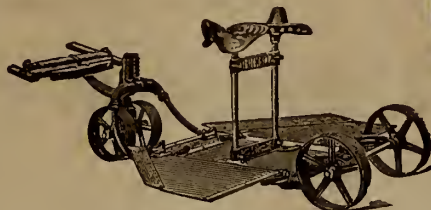
The above illustration is that of the Ross Wood Frame Pole Saw for sawing all kind of timber, both long and short. The construction of same is the very best. The lumber used is hard wood and good size, not frail in any particular. The bearings are all babbitted. The arbor is extra large, size 1 7-16 inches, and has heavy fly wheel. Frame is not nailed together, but mortised and tennoned and bolted. They are as good as the best and better than the majority of others. The table is equipped with rollers, making it convenient to handle heavy timber. Write for special catalogues and prices.



Studebaker Farm Trucks—with wood or steel wheels and removable bolster stakes. Write for prices and catalogues.

## MILWAUKEE CORN HUSKERS AND FODDER SHREDDERS

THE Lightest, Strongest, Simplest and Most Durable Corn Husker on the Market.



SCIENTIFIC STEEL CORN HARVESTER. The best Harvester on earth for standing corn. Safety Seats. Safety Shafts. Write for Special circulars of scientific corn Harvesters. Thousands in use giving perfect satisfaction.

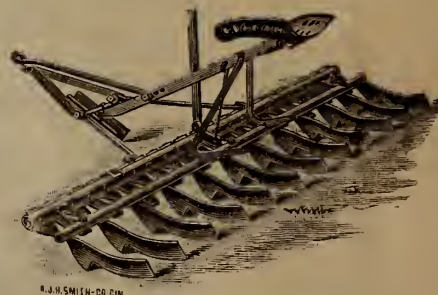


Kemp's Twentieth Century Improved Manure Spreader. Made in three sizes. Write for special catalogue and prices.



SUPERIOR GRAIN DRILLS.

Plain and Fertilizer, Hoe and Disc Drills. All Sizes.



"The" Improved All Steel and Iron ACME Harrow. It crushes, cuts, tears, smooths and levels, all in one operation. The cheapest riding harrow made. Write for circulars and price.

## THE EAGLE DUMP WAGON.



One Chain Only,  
But a Chain under each Door.  
It Suits Contractor and Teamster

Scientific No. 8 used as a power, including 15-foot tumbling rod, two rod rests, and pulley, either 18 by 4 inches, 20 by 4 inches, or 24 by 4 inches. Tumbling rod makes 58 revolutions per minute. Fast enough for running feed cutters, shellers, wood saws, etc.



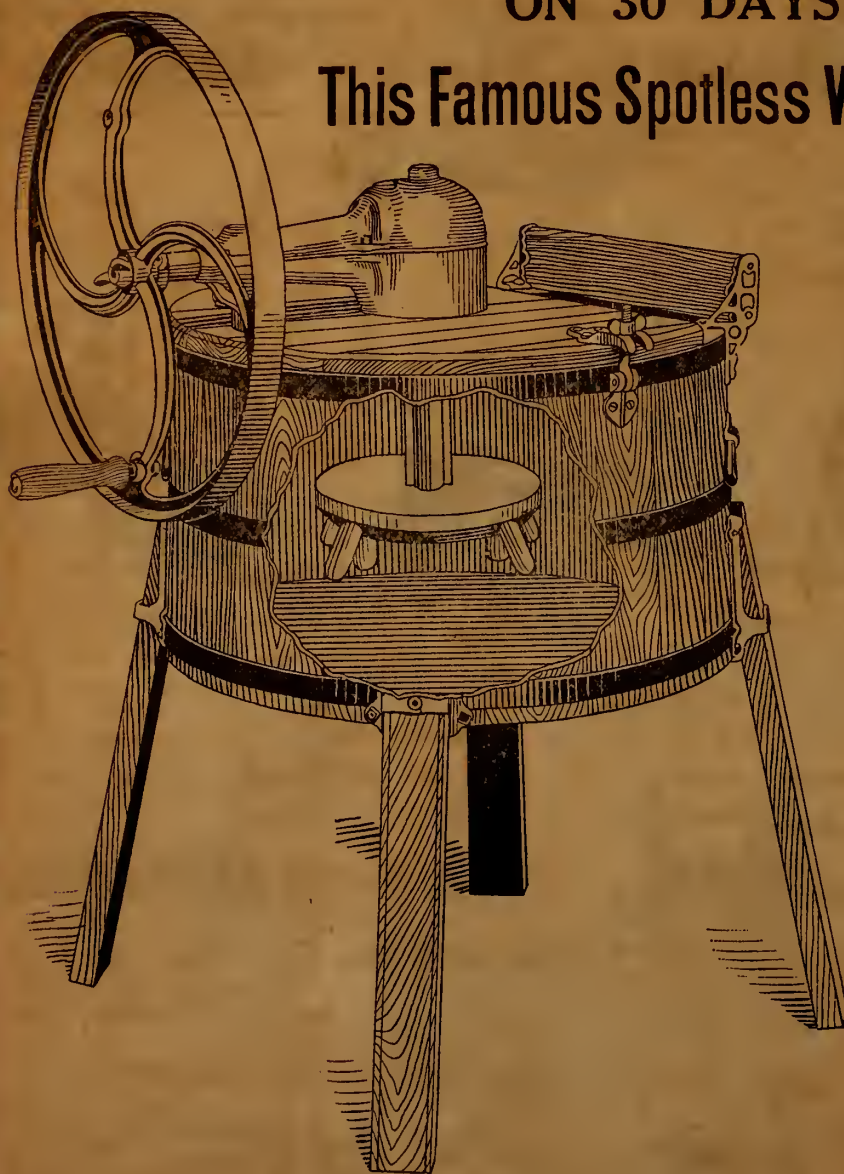
HENING & NUCKOLS, 1436-38 E. Main Street, Richmond, Va.



# FREE TO YOU!

ON 30 DAYS TRIAL

## This Famous Spotless Washing Machine



Write us a postal card to-day and we will ship you at once this wonderful washing machine and wringer. It comes right to your depot without any trouble on your part. Try it for 30 days, give it the hardest kind of a test and then, if not satisfactory, send it back to us by freight and we will pay the charges back. If you do like it, we will make the payments on such easy installments that any one can buy it.

**STOP  
SERIOUSLY  
TO  
THINK**

if you could imagine a fairer offer than this. Could we make it if the Spotless was not one of the best washers in the world. Moreover there are no strings to this offer, it is a square deal and is just as it is written. All you have to do is to send us say two references that we may know who you are. Our Spotless Washer is honestly made of Selected Virginia White Cedar—is steam tight—has all its mechanism enclosed—no danger of hands or clothing being caught—is ball bearing like a bicycle and is the only machine made in the world that is automatically lubricated; that is why it runs so easily. Send to-day for full particulars of this remarkable machine.

# The Spotless Company

122 SHOCKOE SQUARE, RICHMOND, VA.

— THE SOUTH'S MAIL ORDER HOUSE —



# Farmers & Merchants. Attention!

## THE WATT PLOW CO.

The Largest Dealers in Agricultural Implements,  
Vehicles, Harness, Saw Mills, Gasolene Engines,  
Cider Mills, Etc.

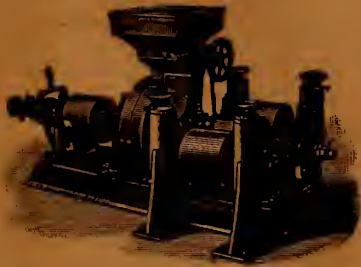
1426 East Main St. and 1438 East Franklin St., RICHMOND, VA.



Agents for  
R. & V. and  
Alamo Gasolene  
Engines from 2 to 20  
Horse Power. Write us  
for prices on  
sizes you

want, and for Catalogue.

The world's  
famous  
Monarch  
"Corn Meal  
and Feed  
Mill." Genuine French  
Burrs. To be  
appreciated,  
it must be tried.



The Sharple's  
New Tubular 'A'  
Different from  
the others. Always  
in the lead. Not a  
'Has Been', but a  
'Right Now' Cream  
Separator

The finest  
line of Run-  
abouts, Top  
Buggies and  
Surries al-  
ways carried  
in Stock.



The New  
Deere Hay  
Loader. It  
loads any kind  
of hay cleanly  
and rapidly  
without break-  
ing or injuring  
in any way.

Write for  
special cir-  
cular.



Cast-Iron Roller.

The Hocking  
Valley Cider  
Mill. The  
best on the  
market. Has  
wooden crush-  
ing roller and  
steel teeth,  
which does  
not discolor  
the cider or  
give it the  
taste of the

Agents for  
Dain Hay  
Presses  
Both Horse  
Power and  
Steam  
Power.



For Sale by **THE WATT PLOW COMPANY,**  
RICHMOND, VA.

1426 East Main Street.

1438 East Franklin Street.



# The Northwestern Mutual Life Insurance Co.

Is Paying out and Investing in both VIRGINIA and NORTH CAROLINA more than it receives from these States

New Business in Virginia, 1908

\$2,147,800

Larger than any other Company



Gain in Insurance in force in Virginia,

1908, \$1,374,975

60% More than the Next Largest

**T. ARCHIBALD CARY, General Agent for Virginia & North Carolina**  
RICHMOND, VIRGINIA.

## - - Corrugated V-Crimp Roofing - -



painted and galvanized

**"Bestoid" Rubber Roofing**

**Carey's Magnesia Cement Roofing**

Tarred Paper, Tin Plate, Lime, Cement, Hardware, Terra Cotta Pipe, Wire Fence, Drain Tile, etc.

SEND FOR CATALOGUE

**BALDWIN & BROWN.**

**1557 E. MAIN ST., RICHMOND, VA.**

## THE EVERLASTING TUBULAR STEEL PLOW DOUBLETREES.

**PAT. W. & S.**

Tripletrees for  
Walking and  
Sulky Plows

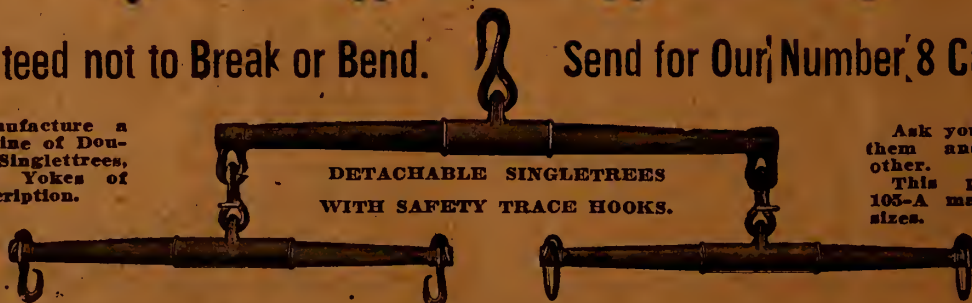


X—Hook or  
Ring in Center  
as desired.

**Guaranteed not to Break or Bend.**

**Send for Our Number 8 Catalogue**

We manufacture a complete line of Doubletrees, Singletrees, and Neck Yokes of every description.



**DETACHABLE SINGLETREES  
WITH SAFETY TRACE HOOKS.**

Ask your dealer for them and take no other. This pattern, No. 105-A made in three sizes.

## BUYERS GUIDE.

The following are some of the houses handling the Everlasting Tubular Steel Doubletrees, carrying a stock of same and can supply customers promptly:

Norfolk Farm and Supply Co.....Norfolk, Va.  
Henning & Nuckols .....Richmond, Va.  
Watt Plow Company.....Richmond, Va.  
T. R. N. Speck .....Staunton, Va.  
Bristow & Worsham Co. ....Richmond, Va.  
Stokes, Williams & Co. ....Blackstone, Va.  
Seay-Dillard Hdw. Co.....Blackstone, Va.

B. K. Gill .....Rehoboth Church, Va.  
Duvall, Son & Co. ....Farmville.  
Paterson & Jefferson.....Petersburg.  
Walker, Carroll, Adams Hdw. Co. Charlottesville, Va.  
Baker-Jennings Hdw Co.... Lynchburg, Va.  
Ansle-Martin Co..... Lynchburg, Va.  
Graves-Humphries Hdw. Co...Roanoke, Va.

**Pittsburg Tubular Steel Whiffletree Company, Sole Manufacturers, Pittsburg, Pennsylvania**